

BIOPHILATELY

OFFICIAL JOURNAL OF THE BIOLOGY UNIT OF ATA

December 2019

VOLUME 68, NUMBER 4

How do you invite a dinosaur to lunch? Tea, Rex?



Vladimir Kachan

Emperor's Butterflies and Moths

More Inside >>



IN THIS ISSUE

| | |
|------------------------------------|-----|
| From the Editor's Desk | 263 |
| President's Message | 264 |
| Secretary-Treasurer's Corner | 265 |
| New Members | 265 |
| News of Note | n |
| Article..... | n |
| Article..... | n |
| Article..... | n |
| Glossary..... | n |

NEW ISSUES:

| | |
|-------------------------------------|---|
| Botany – Christopher E. Dahle | n |
| Fungi – Paul A. Mistretta | n |
| Mammalia – Michael Prince..... | n |
| Ornithology – Glenn G. Mertz..... | n |
| Herpetology – Dick Roman | n |
| Invertebrates – Ian Hunter | n |
| Ichthyology – J. Dale Shively..... | n |
| Entomology – Donald Wright, Jr..... | n |
| Paleontology – Michael Kogan | n |

ARTICLES & ILLUSTRATIONS:

| | |
|--|---|
| Principles of Zoological Nomenclature – Juan José Parodiz | n |
| Amphibian Earthquake Prediction – Vic Eichler | n |
| Butterflies in Culture– Vladimir Kachan | n |
| New Birds in the Philatelic Aviary – Charles E. Braun | n |
| Biology Reference Websites | n |

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Send membership enquiries and change of address notices to the Secretary, Chris Dahle, (319) 364-4999, address at left. See the following page for dues rates.

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The purpose of this journal is to provide members with informative articles dealing with biological topics and to publish listings covering the new **zoological** and **botanical** issues of the world, identified and classified to the best of our ability.

Please send letters, comments on the journal, articles, or new material to the Editor (data above). The Publisher will handle requests for issues from the current year. Contact the Librarian (address above) for copies of all other issues.

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PLEASE NOTE: Material for the next issue should be in the hands of the Editor before 15 February 2020.

FROM THE EDITOR'S DESK

Somehow the calendar has flipped to the end of another year. It is hard to imagine where the time went. But, when I look back at all the activities and accomplishments, I suppose I should not be surprised.

This year we did not see many changes in the organization and activities of the Biology Unit. The Unit helped to sponsor the American Topical Association booth at the joint ATA-American Philatelic Society stamp show in Omaha, Nebraska, in August. This joint show was another very successful event for both organizations.

After two straight years of combined ATA-APS shows, the American First Day Cover Society will be joining the party next year for a triple joint show in Hartford, Connecticut. This major event is so significant that it has merited a brand new name: **The Great American Stamp Show.**



I strongly encourage every Unit member to come to this show next year. The ATA is making lots of plans to welcome you and the Biology Unit will be represented there as well. You will seldom find so many and varied dealers in one location and the exhibits are some of the best and most interesting that you will see anywhere. On top of all that, there will be a full schedule of philatelic activities, seminars, society meetings, social events, and other fun happenings to keep you entertained.

Recently, I read an article about Botox. The term is a registered trademark and an abbreviation for “botulinum toxin,” a neurotoxin produced by the bacterium *Clostridium botulinum*. It is a very powerful poison. Just one gram of the toxin is enough to kill more than one million people. Two kilograms could kill the entire human population of the Earth. Despite this, it is used as a cosmetic treatment and to treat some medical disorders.

This article made me think about how we use euphemisms. People who have little concern about using “Botox” might think again when they realize they are being injected with a deadly “toxin.” It reminded me also of a piece of equipment we find in every modern passenger vehicle called an “air bag.” There is absolutely no “air” in an air bag. It is physically impossible to inflate such a device rapidly enough in the split second of a collision using air.

Instead, the inflation is accomplished by means of a controlled chemical explosion. I am pretty sure that the automotive industry rightfully concluded that consumers would be rather leery of buying a vehicle equipped with an “explosion bag.” Thus, the euphemism “air bag” entered our lexicon.

This issue marks the final column for our Invertebrate Zoology Associate Editor Ian Hunter. Ian was the Invertebrate editor between 1998 and 2004, and then came back to fill the job in 2007, when Roy Rings retired. Ian has given up collecting and is in the process of selling his collection. We wish him all the best and offer our sincere gratitude for his help and contributions to the Unit over this long period.

Now the Invertebrate Editor position is open and we are seeking someone to fill it. Please contact the Editor if you are interested. Otherwise, I will be twisting some arms very soon.

Jack R. Congrove

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Please see the Biology Unit website (www.biophilately.org) for membership applications. Several payment options are available. Send applications and payments payable to the **Biology Unit of ATA** to: Chris Dahle, 1401 Linmar Drive NE, Cedar Rapids, IA 52402

PRESIDENT'S MESSAGE

Summer is over and winter is here! With the colder weather, I am moving indoors. Watching the beautiful trees all in color and the squirrels gathering nuts is better viewed from indoors with a big mug of hot tea. I love to watch the birds at the feeders, so many amazing colors and personalities.

I recently attended a local fish auction. Now I am rearranging fish tanks to find room for my new acquisitions. As well, I have to find space for new babies. The adults are breeding like crazy. These fry are important, as their species are listed as highly endangered. They are more or less extinct in the wild.

Recently a new initiative was created to protect endangered or threatened fish throughout the world. Aquarium hobbyists worldwide are encouraged to maintain a colony of a listed species and ensure a healthy line. The hope is that one day these fish can be reintroduced to their habitat when conditions are better. I keep two such species, one from China and one from Mexico. They are both extinct in the wild because of extreme pollution to lakes and rivers. One wonders just how many biological species are threatened because of wars, pollution, and invasive species. As philatelists, we need to help preserve the flora and fauna that we so lovingly collect.

Looking at my *Linn's* magazine, I noticed all the wonderful flora stamps to be issued in 2020. There will be numerous flowers, and although they are paintings, some yummy looking fruits and vegetables. I especially love the garden set. They remind us how beautiful nature is.

Wishing everyone a Happy Holiday Season.

Laurie Ryan



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SECRETARY-TREASURER'S CORNER

DUES

It is time to pay your annual membership dues for 2020, if you have not already done so. The dues rates are shown at the bottom of page 237. Please remit your dues to the Secretary-Treasurer: Chris Dahle, 1401 Linmar Dr. NE, Cedar Rapids, IA 52402.

ELECTION RESULTS

Ballots for election of Unit officers and board members were sent with the last edition of the journal. We received 22 completed ballots by the voting deadline, 14 by mail and eight via email. There were no write-ins. Each officer and two of the directors won unanimous re-election on all ballots. The other two directors received votes on 21 of the 22 ballots. In accordance with the Unit By-Laws, the following persons will serve a two-year term in the position designated commencing on 1 January 2020.

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NEW MEMBERS & REINSTATEMENTS

The Biology topic is immensely popular. It is likely that someone in your local club is a collector of something related to zoology or botany. Sign them up. The Biology Unit welcomes the following new members:

| | | |
|------|--|---|
| 1857 | Indraneil Das, Malaysia (reinstated) | frogs (4) |
| 1897 | Harvey Robins, Sault Ste. Marie, Ontario | fish & fishing(6) |
| 1898 | Louis Morel, Holland, Michigan | science in general, music |
| 1899 | Deborah Hathaway, Mansfield, Texas | orchids (2), butterflies (7), basset hounds |

ASSOCIATE EDITORS WANTED

With the retirement of Ian Hunter, an opening has arisen for a new Associate Editor for Invertebrates. Ian has performed in this position for almost 20 years, and we very grateful for his service to the Biology Unit. We also have an opening for an Associate Editor for Microbiology. These positions involve tracking the new philatelic issues in the biological category and submitting a listing to the Editor for publication each quarter. Because most topical collectors maintain an inventory and keep track of the material in their topic already, it should not take much additional effort to extract a listing for publication.

If you are interested in filling either of these positions, please contact the Editor, Jack Congrove (see inside cover for address information). He will work with you to make the job as easy as possible.

NEWS OF NOTE

NEW ATA HEADQUARTERS

As mentioned in the last edition, the headquarters of our parent organization, the American Topical Association (ATA), has moved, and the new ATA Executive Director, Jennifer Miller, has been busy setting up the new office. Please use the new address to correspond with the ATA: P.O. Box 2143, Greer, SC 29652-2143. The email address and phone number have not changed: *americantopical@msn.com*, and (618) 985-5100.

HOLIDAY CHECKLIST

For the past several years, the ATA has offered a special free checklist to its members as a holiday gift and in appreciation for their loyalty to the organization. This year, the subject of the list is “Wreaths.”

Most of the 78 entries in the listing are related to the Christmas holiday, but there are other types as well. The design of the cover is the product of the new ATA Executive Director, Jennifer Miller, and her husband, Martin Miller. The listing was prepared by the ATA Checklist Coordinator, Beth Scully.

If you are an ATA member, you can find details for obtaining this list on the ATA website (*www.americantopicalassn.org*).

The checklist coordinators, Dom Sgro and Beth Scully, have been busy updating the dATAbase and now have 1,430 “standard” checklists available to ATA members. They are also able to produce a customized search if you want a topic that is not one of the standard products. New topics are added each month.

It is easy to order a checklist. Email the ATA office at *americantopical@msn.com*, or call 618-985-5100. They will give you the total quantity of items in the checklist so you can make payment by check or PayPal. The cost is two cents per entry with a minimum cost of \$3, and a maximum cost of \$75. You have the choice to receive your list as an Excel spreadsheet or PDF document.



DISCOUNT CARD

The American Topical Association has provided each of its Study Units, including the Biology Unit, with a discount card from Office Depot/Office Max that will provide a significant discount on printing, and which covers many other office supplies including HP ink.

Our officers and publisher will be taking advantage of this discount when we have printing or copying to do.

STAMP STORIES

Jack R. Congrove, BU1424

These are the final pages of the Biology Unit one-frame exhibit “What Does (your topic) Do in Its Spare Time?” shown at the joint ATA-APS show in Columbus, Ohio.

Page 11: Tomatoes (Dawn Hamman)





THEY WENT NUTS!

While waiting for pollinators, the trees went nuts!



American Chestnut misperf



BOOK REVIEW

Dr. Peter J. Voice, BU1891

[Ed. note: Dr. Voice is an instructor in the Department of Geological and Environmental Sciences at Western Michigan University. He is the author of *Paleozoic Geology of the Central Upper Peninsula of Michigan (2014)*.]

Review of *Fossile Fische weltweit: Die Welt der prähistorischen Fische und ihr Spiegelbild in der Philatelie (Fossil Fishes Worldwide: The World of Prehistoric Fishes and their Reflection in Philately)* by Drs. Hans Ulrich Ernst and Oliver Hampe.

Fossil Fishes Worldwide is the third book written by Dr. Hans Ulrich Ernst on paleontological themes in stamp collecting. Verlag Dr. Friedrich Pfeil published the book in December 2018. It follows the same format as the previous books (*Trilobites Worldwide* and *Nautiloids and Ammonoids Worldwide*), a bilingual, thorough treatment of the subject matter extensively illustrated with photographs of fossils and the stamps that depict the same fossils. Many of the fossils illustrated are archived at the Museum for Naturkunde in Berlin.

Ernst and Hampe begin the text with an introduction to Paleoichthyology, placing fish in the context of vertebrate evolution and describing the basic anatomy, characteristics, and geologic records of the major groups of fish (Agnathans: jawless fish; Placoderms: extinct, armored fish; Chondrichthyes: sharks and their relatives, and the Osteoichthyes: the bony fish).

Through a series of sketches, they label the major anatomical features in each group. The introduction finishes with descriptions of some major European *lagerstätten*—places characterized by exceptional preservation of fossil organisms.

Chapters 2 (Agnathans) and Chapter 3 (Gnathostomes—all of the other groups) provide an overview of the variety of fossil fish that have been illustrated on stamps, starting with the Agnathans and working through the rest of the major groups. These chapters are organized by taxonomy—within each class by the genus (and in some cases particular species).

Each genus follows a standard template: The genus name and basic taxonomy (Class, Order, Family, Genus), followed by a review of the genus's appearance on philatelic materials (stamps, postal cards, souvenir sheets, postmarks, etc.), and an anatomical description of the genus with some inferences on the habitats that the animal lived in. The description is followed by a brief statement of the length of the animal, the geologic age of the genus, and location(s) where fossils of that genus have been found. For each genus, Ernst and Hampe provide labeled photographs of fossils as well as scanned images of stamps and other philatelic materials that exhibit the genus.

Chapter 4 will delight modern ichthyologists and paleoichthyologists as it focuses on the Coelacanth. Coelacanths are sarcopterygian fish, a subdivision of the osteoichthyan fish with pectoral and pelvic fin structures that are similar to the bones in tetrapods. Coelacanths are related to the lobe-finned fish (Rhipidistia), which are more commonly called lungfish.



Cover photograph courtesy of Verlag Dr. Friedrich Pfeil (<https://pfeil-verlag.de/publikationen/fossile-fische-weltweit/>)



Mene psarianosi Symeonidis
Greece, 12 May 1979
Sc#1298

Lobe-finned fish are the close cousins of all tetrapods (the four-limbed vertebrates including amphibians, reptiles, birds, and mammals). Coelacanths were long thought to have gone extinct at the end of the Cretaceous until their rediscovery off the eastern coast of South Africa in 1938. Subsequent searching has found living populations in a wide portion of the deeper coastal waters off southeastern Africa (from the Republic of South Africa to Kenya), Madagascar, the Comoros Islands, and even a more recent discovery in Indonesia. Ernst and Hampe provide a detailed summary of their rediscovery as well as discussion of their anatomy, ecology, and reproduction. A variety of philatelic materials have exhibited the modern genus of Coelacanth—*Latimeria* and are reproduced in the book.

Brief Chapters 5, 6, 7, and 8 focus on representations of fossil fish on stamps that cannot be reliably identified to the genus, as they are either in the background and not the central motif of the stamp, or fanciful reconstructions that cannot be easily identified, or are local issues. Note that Ernst and Hampe do illustrate issues from Western Sahara in their collection of fossil fishes on philatelic materials.

Chapter 8 is their footnote that justifies the inclusion of these stamps, as the paleoartist whose reconstructions of these fossil fish did an excellent job and the Western Sahara stamps faithfully recorded the genera names on their issues. The Western Sahara issues also add to the diversity of fossil fish shown on stamps.

Their text ends with references, both paleontological and philatelic. For the collector, the tables after the references provide multiple checklists of paleoichthyological stamp issues, including a table summarizing issues on modern Coelacanths.

The strengths of the publication are the extensive photographs of both the actual fossils and the various fish shown on stamps (as fossils or as reconstructions of what the fish looked like in life). The photographs of the fossils (and some preserved specimens of closely related modern species) are of good quality and clearly show the size of the individual with handy scale bars. For philatelic materials, Ernst and Hampe show the whole material, and with souvenir sheets, a close-up on the specific stamp or portion of the margin illustrating the genus of interest for that set. Captions include the country of origin, the genus shown, the date of the first issue, and, if part of a larger set of stamps, the position within the sheet or set.

The book is bilingual. It is organized such that the left column of each page is in German and the right column in English. All figure captions are bilingual as well—the upper text in German and the lower in English. In places, the English translation is a bit idiosyncratic, no doubt due to the difficulty of not only translating from German to English, but also attempting to translate from scientific German to scientific English.

Fossile Fische weltweit is available at Amazon.com (current list price as of May 2019 was \$50.67 new) as well as through the Publisher's webpage (Verlag Dr. Friedrich Pfeil <https://pfeil-verlag.de/publikationen/fossile-fische-weltweit/>, with a list price of 48 euros). Dr. Ernst's other books are also available at Amazon and through the publisher: Ernst and Rudolf (2002): *Trilobiten weltweit: Die Welt der Dreilapper und ihr Spiegelbild in der Philatelie (Trilobites Worldwide: The World of Trilobites and their Reflection in Philately)*; and Ernst and Klug (2011): *Perlboote und Ammonshörner weltweit (Nautilids and Ammonites Worldwide)* and *Die Welt der Kopffüßer und ihr Spiegelbild in der Philatelie (The World of Cephalopods and their Reflection in Philately)*.



Asterolepis ornata Eichwald
Latvia, 20 February 2015
Sc#905



Dapedium sp.
Luxembourg, 9 October 1984
Sc#717



Chaetodon hoeferi Gorjanovic-Kramberger
Yugoslavia, 4 February 1985
Sc#1724

EMPEROR'S BUTTERFLIES AND MOTHS

Vladimir Kachan, Belarus

An emperor was the biggest, baddest ruler of them all—the leader of undisputed power who controlled a nation, or more usually, a number of subjugated nations known collectively as an empire. Nowadays, the notion of an all-conquering larger-than-life figure lives on in the way we give the prefix emperor to particularly magnificent specimens of living things: the Emperor Butterfly, Emperor Moth. Emperor butterflies comprise some of the largest most beautiful butterflies. They are large, brightly colored, fast flying, and enjoy a good drink.

Morpho peleides, the Peleides Blue Morpho, Common Morpho, or the **Emperor** is an iridescent tropical butterfly found in Mexico, Central America, northern South America, Paraguay, and Trinidad. The brilliant blue color in the butterfly's wings is caused by the diffraction of the light from thousands of tiny scales on its wings.

It uses this to frighten away predators, by flashing its wings rapidly. Pilots flying over the rain forest can occasionally see brief flashes of blue as these butterflies travel above the forest canopy. The wingspan of the Emperor butterfly ranges from 7.5–20 cm. The Emperor is an uncommon butterfly that is found around flowers late in the day in the summer months. It is the only butterfly that can be found in the night.



Papilio ulysses (imperf)
Australia, 1983, Sc#875

Papilio ulysses, the Ulysses butterfly, also commonly known as the **Blue Emperor**, is a large swallowtail butterfly of Australia, Indonesia, Papua New Guinea, and the Solomon Islands with wingspan of about 14 cm. The upper side of the wings are an iridescent electric blue; the underside is a more subdued black and brown.

The colors are produced by the microscopic structure of the scales, a phenomenon called structural coloration. When the butterfly is perched, the intense blue of its wings is hidden by the plainer brown underside of its wings, helping it to blend in with its surroundings. When in flight, the butterfly can be seen hundreds of meters away as sudden bright blue flashes. This butterfly is used as an emblem for tourism in Queensland, Australia.

Papilio ophidicephalus, known as the **Emperor Swallowtail**, is a large, colorful butterfly with a wingspan up to 120 mm. It is found in Sub-Saharan Africa. It is an impressive black swallowtail with a distinctive pattern of pale yellow marginal spots and bands on both the forewings and hindwings. The hindwings are notable for the especially long tails, and blue and red eyespots.



Sasakia charonda
Japan, 1956, Sc#622
w/ color-missing error

Butterfly Omurasaki (*Sasakia charonda*) is one of some species of butterflies commonly known as the **Japanese Emperor**. The butterfly has a beautiful purple wings with yellow, white, and red spots that stand out in the natural green.

With a wingspan of 9–12 cm, the butterfly is a big member of the family Nymphalidae, which is grouping of butterflies with large sizes that are visible during the warm months all across Japan.

It is a powerful flier thanks to its robust body. Its strong wing beat can be heard from some meters away. The Japanese Emperor was designated as the “National Butterfly of Japan” by Entomological Society of Japan in 1956, because the butterfly lives throughout the country.



Morpho peleides
Grenada-Grenadines,
1975, Sc#75



Papilio ophidicephalus
Zambia, 1997, Sc#682

The **Purple Emperor** (*Apatura iris*), as the male butterfly is affectionately known, is a magnificent and elusive butterfly with a wingspan up to 90 mm that is actively sought out by the many collectors. It is widely distributed in dense, broadleaved woodlands throughout Central Europe, and in suitably temperate parts of Asia, including central and western China.

This butterfly spends most of its time in the woodland canopy where it feeds on aphid honeydew, with the occasional encounter when it comes close to the ground to feed on sap runs or, in the case of the male, animal droppings, carrion, or moist ground that provide much-needed salts and minerals.

The male butterfly is one of the most beautiful of all of the butterflies found in Europe. From certain angles it appears to have black wings intersected with white bands. However, when the wings are at a certain angle to the sun, they display the most beautiful purple sheen, a result of light being refracted from the structures of the wing scales. The female, on the other hand, is a deep brown and does not possess the purple sheen found in the male.

The beautiful blue *Charaxes imperialis* butterfly is commonly known as the **Imperial Blue Charaxes**. It is widely distributed from Guinea-Bissau through much of the equatorial forest to Uganda, Rwanda, and northwestern Zambia. The habitat mainly seems to be drier forest systems and it is often absent from true evergreen forest. This butterfly is widely distributed in no fewer than nine subspecies. It has a wingspan of 85–100 mm. This butterfly needs a forest environment of reasonable condition and so may be threatened by deforestation and degradation of its habitat.



Apatura iris
Hungary, 1959, Sc#1271 w/ printing freak



Charaxes jasius
Italy, 1960
(unissued design artwork)

Charaxes jasius, the Two-tailed Pasha or **Foxy Emperor**, is another butterfly in the family Nymphalidae. This species occurs in the Mediterranean region and Africa. *Charaxes jasius* is a medium-to-large butterfly with a wingspan reaching 65–75 mm in males and 75–90 mm in females.

The upper sides of the wings are dark brown with orange margins. The hindwings have two short tails, characteristic of most species of this genus. The underside of the wings is reddish-brown with numerous darker bands edged with white or gray. The adults prefer ripe fruits, of which they suck the sugary liquids and these butterflies are by no means shy of humans. It is possible to bait these butterflies with sweet fruit or liquor.

The **Orange Emperor** butterfly (*Charaxes latona*) is a fast-flying and conspicuous insect with a wingspan up to 8 cm. It is native to the tropical rainforests of eastern Indonesia, western Melanesia, and far northern Queensland, Australia. They fly all year and may complete several generations annually.

Males are territorial and occupy perches some six meters up in forest trees, while females frequent forest edges and clearings. The adult butterflies are brown with a submarginal band of black spots, which are wide at the forewing tip and narrow at the hindwing tornus. Underneath, they are orange with thin wavy black lines. The males have a lilac tinge underneath. Adults are attracted to sap flows and are said to be attracted to fermenting fruit baits.



Charaxes latona
Antigua & Barbuda, 2003,
Sc#2712c

Looking at the butterfly *Teinopalpus imperialis* it is easy to understand why it is called **The Emperor of India**. With its shimmering greens, bright yellows and delicate blacks, this rare butterfly is a visual delight. This magnificent butterfly is found from Nepal and northern India east to northern Vietnam. In these areas, it occurs at

medium and higher elevations from 6,000 to 10,000 feet in well-wooded terrain. It has a strong and fast flight. Although the butterfly is protected under Indian law, it is hunted for sale to butterfly collectors.



Saturnia pavonia
Ireland, 1994, Sc#933

Saturnia is a genus of moths in the family Saturniidae. They are large moths, commonly called Emperor moths. The adult **Emperor Moth** (*Saturnia pavonia*) is a truly spectacular insect. On the wing between April and June, the male of this large, day-flying moth species is a particularly striking sight, and can easily be mistaken for a butterfly due to its bright colors.

The heavily scaled wings of the Emperor Moth, which occurs in temperate regions of Europe and Asia, are marked by transparent eyespots, which presumably serve a protective function in frightening predators. It is a fairly widespread species, one that favors open scrub habitat on heath land, moorland, fens, along field margins and hedgerows, woodland rides and sand dunes.

This is a large moth, with females reaching a wingspan about 80 mm and the males a wingspan of about 60 mm. For the few months that they are on the wing, adult Emperor Moths do not feed at all. Their sole purpose is to find a mate and reproduce.



Saturnia pyri
Austria, 1995, postal card

This species starts to emerge after the onset of cool and misty autumn nights. Adults are on wing from late September to early November. Both sexes remain active down to temperatures of 2° C, and will even tolerate mild frosts.

Butterflies and moths are the most beautiful creations of nature, the top of its artistic mastery, undoubted masterpieces of evolution. The hundreds of different species of butterflies and moths surprise us with their beauty and a creative peak of perfection. There are many fascinating and unusual species among butterflies and moths, which are the adornment of nature, have great scientific and cognitive significance, and bring real joy and boundless aesthetic delight.

The Author is ready to help for philatelists in creating of philatelic exhibits on butterflies and moths. His address: Vladimir Kachan, street Kulibina 9-49, Minsk-52, BY-220052, Republic of Belarus
E-mail: vladimirkachan@mail.ru



Teinopalpus imperialis
Nepal, 2006, Sc#774
(essay)

Saturnia pyri, the Giant Peacock Moth, also called **Giant Emperor Moth**, or **Viennese Emperor**, is a Saturniid moth that is native to Europe. It is the largest European moth, with a wingspan reaching 15–20 cm. Males of this species, with feathery antennae, can perceive the pheromones of a female at a distance of eight kilometers.

The **Autumn Emperor Moth** (*Perisomena caecigena*) is a moth from southwestern Europe with wingspan up to 90 mm. Females are reddish-brown to pale wine-red with some yellowish markings. The males are pale sandy yellow to deep yellow with reddish markings along the postmedial bands. The males bear exceptionally large, pectinate antennae.



Perisomena caecigena
Bulgaria, 1968, Sc#1705

ANIMAL QUIZ

[Ed. note: This quiz is extracted from the “Super Quiz” syndicated newspaper column by Ken Fisher that appeared in newspapers on 16 November 2019.]

Take this Super Quiz to a Ph.D. Score one point for each correct answer in the Freshman Level, two points on the Graduate Level, and three points on the Ph.D. Level.

Freshman Level

1. What kind of animal is a mallard?
2. The only mammal that can truly fly.
3. This flightless bird has a three-letter name.
4. “Lupine” refers to this animal.
5. This bird is so named because it often inhabits barns.

Graduate Level

6. What animal is the world’s second tallest animal?
7. This common bird is so named because of its plaintive call.
8. What type of animal is a swallowtail?
9. This flightless bird is an excellent swimmer.
10. Name either of the two main types of camel.

Ph.D. Level

11. This animal is depicted on the flag of California.
12. This mammal is similar to a hyena, but feeds mainly on termites and insect larvae.
13. What large animal other than humans “sing?”
14. What kind of animal is a bonobo?
15. Lard is the rendered fat of what animal?

Answers: 1. Duck. 2. Bats. 3. Emu. 4. Wolf. 5. Barn Owl (or Barn Swallow). 6. Elephant. 7. Mourning Dove. 8. Butterfly. 9. Penguin. 10. Bactrian & Dromedary. 11. Bear. 12. Aardwolf. 13. Whales. 14. Chimpanzee. 15. Pig.

Scoring: 24 to 30 points – congratulations, doctor. 18 to 23 points – honors graduate. 13 to 17 points – you’re plenty smart, but no grind. 5 to 12 points – you really should hit the books harder. 1 to 4 points – enroll in remedial courses immediately. 0 points – who reads the questions to you?



BOTANY

Editor

Christopher E. Dahle, BU1269

New Listings



| Scott# | Denom | Common Name/Scientific Name | Family/Subfamily | Code |
|--|-------|---|------------------|---------|
| ANTIGUA | | | | |
| 2018 November 1 (Flowers) (MS/6) | | | | |
| 3434a | \$2 | Lobster Claw, <i>Heliconia rostrata</i> | Heliconiaceae | Fl A MS |
| 3434b | \$3 | Easter Lily or Barbados Lily, <i>Hippeastrum puniceum</i> | Amaryllidaceae | Fl A MS |
| 3434c | \$4 | Flamingo Flower, <i>Anthurium andraeanum</i> | Araceae | Fl A MS |
| 3434d | \$5 | Red Frangipani, <i>Plumeria rubra</i> | Apocynaceae | Fl A MS |
| 3434e | \$6 | False Bird-of-Paradise, <i>Heliconia psittacorum</i> | Heliconiaceae | Fl A MS |
| 3434f | \$7 | Flaming Torch, <i>Billbergia pyramidalis</i> | Bromeliaceae | Fl A MS |
| ARGENTINA | | | | |
| 2019 (Fruits Type of 2016) (Single) [see Vol. 66(4)] | | | | |
| 2791A | 35p | Stylized Blueberries, <i>Vaccinium</i> ssp. | Ericaceae | Fr A S |
| 2019 (Vegetables Type of 2016) (Single) [see Vol. 66(4)] | | | | |
| 2802A | 35p | Stylized Broccoli, <i>Brassica oleracea</i> var. <i>italica</i> | Brassicaceae | V A S |
| AUSTRALIA | | | | |
| 2018 February 20 (Banksia Type of 2018) (Set/4) [see Vol. 67(3)] | | | | |
| 4759 | \$1 | <i>Banksia speciosa</i> (w/ personalized photo) | Proteaceae | Fl A |
| 4760 | \$1 | <i>Banksia grossa</i> (w/ personalized photo) | Proteaceae | Fl A |
| 4761 | \$1 | <i>Banksia coccinea</i> (w/ personalized photo) | Proteaceae | Fl A |
| 4762 | \$1 | <i>Banksia cuneata</i> (w/ personalized photo) | Proteaceae | Fl A |
| 2019 February 5 (Greetings Type of 2019) (Set/7) [see Vol. 67(3)] | | | | |
| 4931 | \$1 | Rose bouquet, <i>Rosa</i> × <i>hybrida</i> (w/ personalized photo) | Rosaceae | Fl A |
| 4932 | \$1 | White Rose, <i>Rosa</i> × <i>hybrida</i> (w/ personalized photo) | Rosaceae | Fl A |
| 2019 August 1 (Gardening) (Set/5, SS/5, 7ea Bklt) | | | | |
| 4994 | \$1 | U/I flowers (Rainwater garden) | | Fl U B |
| 4994a | | Bklt/4 (Sc#4994) (perf 14×14¾) | | |
| 4995 | \$1 | U/I flowers (Worm farm) | | Fl U B |
| 4995a | | Bklt/4 (Sc#4995) (perf 14×14¾) | | |
| 4996 | \$1 | U/I flowers (Nest box) | | Fl U B |
| 4996a | | Bklt/4 (Sc#4996) (perf 14×14¾) | | |
| 4997 | \$1 | U/I flowers (Pollinators) | | Fl U B |
| 4997a | | Bklt/4 (Sc#4997) (perf 14½×14) (50×30mm) | | |
| 4998 | \$2 | Tomatoes, <i>Lycopersicon esculentum</i> (Vegetable garden) | Solanaceae | Fr V B |
| | | Kale & Cabbage, <i>Brassica oleracea</i> | Brassicaceae | Fr V B |
| | | Pumpkin, <i>Cucurbita pepo</i> | Cucurbitaceae | Fr V B |
| 4998a | | Bklt/2 (Sc#4998) (perf 14½×14) (50×30mm) | | |
| 4998b | | SS/5 (Sc#4994–98) | | |
| 4999 | \$1 | U/I flowers (Rainwater garden) | | Fl U B |
| 5000 | \$1 | U/I flowers (Worm farm) | | Fl U B |
| 5001 | \$1 | U/I flowers (Nest box) | | Fl U B |
| 5001a | | Bklt/20 (6ea Sc#4999, Sc#5001, & 7ea Sc#5000) (die cut 11¼) (s/a) (38×26mm) | | |
| 5002 | \$1 | U/I flowers (Pollinators) | | Fl U B |
| 5002a | | Bklt/10 (Sc#5002) (die cut 10¾) (s/a) (50×30mm) | | |

| | | | | |
|---|------------|---|----------------|---------|
| AUSTRALIA (continued) | | 2019 August 13 (Bush Citrus) (Set/3, Strip/3, SS/3) | | |
| 5003 | \$1 | Desert Lime, <i>Citrus glauca</i> | Rutaceae | Fr A |
| 5004 | \$1 | Finger Lime, <i>Citrus australasica</i> | Rutaceae | Fr A |
| 5005 | \$1 | Lemon Aspen, <i>Acronychia acidula</i> | Rutaceae | Fr A |
| 5005a | | SS/3 (Sc#5003–05) (perf 14×14¾) | | |
| | Margin | Australian Round Lime or Dooja, <i>Citrus australis</i> | Rutaceae | Fr Z SS |
| 5006 | \$1 | Desert Lime, <i>Citrus glauca</i> | Rutaceae | Fr A |
| 5007 | \$1 | Finger Lime, <i>Citrus australasica</i> | Rutaceae | Fr A |
| 5008 | \$1 | Lemon Aspen, <i>Acronychia acidula</i> | Rutaceae | Fr A |
| 5008a | | Horiz Coil Strip/3 (Sc#5006–08) (die cut 11¼) (s/a) | | |
| BELARUS | | 2018 October 10 (25th anniv. Diplomatic Relations w/ Armenia) (SS/2) | | |
| 1112a | SS (1.74r) | Ptg: “Winter Roses,” <i>Rosa × hybrida</i> | Rosaceae | Fl A SS |
| 1112b | SS (1.74r) | Ptg: “Still Life in a Dark Room,” U/I flowers | | Fl U SS |
| BELGIUM | | 2019 June 17 (Star-shaped Items in Nature) (MS/5+4 labels) | | |
| 2896d | (€1.40) | Star Fruit, <i>Averrhoa carambola</i> | Oxalidaceae | Fr A MS |
| 2896e | (€1.40) | Impala Lily, <i>Adenium multiflorum</i> | Apocynaceae | Fl A MS |
| BOSNIA & HERZEGOVINA | | 2018 September 10 (Nuts) (Strip/5+5 labels) | | |
| 804a | 90pf | Hazelnuts, <i>Corylus avellana</i> | Betulaceae | Fr A |
| 804b | 90pf | Pistachios, <i>Pistacia vera</i> | Anacardiaceae | Fr A |
| 804c | 90pf | Walnuts, <i>Juglans regia</i> | Juglandaceae | Fr A |
| 804d | 90pf | Almonds, <i>Prunus dulcis</i> | Rosaceae | Fr A |
| 804e | 90pf | Peanuts, <i>Arachis hypogaea</i> | Fabaceae | Fr A |
| | | 2018 October 25 (Tree) (SS/1) | | |
| 809 | 1.50m | Willow, <i>Salix alba</i> | Salicaceae | T A SS |
| | | 2018 November 15 (Medicinal Herbs) (Strip/5) | | |
| 811a | 1.10m | Cranberries, <i>Vaccinium oxycoccos</i> | Ericaceae | Fr A |
| 811b | 1.10m | Thyme, <i>Thymus vulgaris</i> | Lamiaceae | Fl A |
| 811c | 1.10m | Chamomile, <i>Matricaria chamomilla</i> | Asteraceae | Fl A |
| 811d | 1.10m | Marigolds, <i>Tagetes erecta</i> | Asteraceae | Fl A |
| 811e | 1.10m | Rose hips, <i>Rosa</i> sp. | Rosaceae | Fr A |
| BOSNIA & HERZEGOVINA (Croat Admin) | | 2018 November 1 (Flowers) (Pair) | | |
| 383a | 2m | <i>Daphne blagayana</i> | Thymelaeaceae | Fl A |
| 383b | 2m | <i>Spiranthes spiralis</i> | Orchidaceae | Fl A |
| BOSNIA & HERZEGOVINA (Serb Admin) | | 2018 October 30 (Fruit) (Set/2) | | |
| 604 | 20pf | Peach, <i>Prunus persica</i> | Rosaceae | Fr A |
| 605 | 2.70m | Apricot, <i>Prunus armeniaca</i> | Rosaceae | Fr A |
| BRITISH INDIAN OCEAN TERR. | | 2018 May 2 (Flowers) (MS/6) | | |
| 488a | 60p | Powder Puff Tree, <i>Barringtonia asiatica</i> | Lecythidaceae | Fl A MS |
| 488b | 60p | Sea Randa, <i>Guettarda speciosa</i> | Rubiaceae | Fl A MS |
| 488c | 60p | Pacific Teak, <i>Intsia bijuga</i> | Fabaceae | Fl A MS |
| 488d | £1 | Beach Cordia, <i>Cordia subcordata</i> | Boraginaceae | Fl A MS |
| 188e | £1 | Beach Calophyllum, <i>Calophyllum inophyllum</i> | Clusiaceae | Fl A MS |
| 488f | £2.50 | Beach Morning-Glory, <i>Ipomoea pes-caprae</i> | Convolvulaceae | Fl A MS |
| BULGARIA | | 2019 July 15 (Grape Harvesting) (Horiz Pair) | | |
| 4907a | 1.50l | Woman w/ basket of Floral Grapes, <i>Vitis vinifera</i> | Vitaceae | Fr B |
| 4907b | 1.50l | Woman w/ basket of Ruby Kaliskin Grapes, <i>Vitis vinifera</i> | Vitaceae | Fr B |

| | | | | |
|----------------------------------|--------|---|-----------------|---------|
| BURMA (Myanmar) | | 2019 (Seasonal Flowers & Festivals) (Set/5) | | |
| 443 | 200k | <i>Clematis smilacifolia</i> (Equestrian festival) | Ranunculaceae | Fl B |
| 444 | 200k | <i>Butea monosperma</i> (Htamanè festival) | Fabaceae | Fl B |
| 445 | 200k | <i>Calophyllum inophyllum</i> (Sand Pagodas festival) | Clusiaceae | Fl B |
| 446 | 200k | LL: <i>Pterocarpus macrocarpus</i> (Thingyan Water festival) | Fabaceae | Fl B |
| | | UL: <i>Mesua ferrea</i> | Calophyllaceae | Fl B |
| 447 | 200k | <i>Magnolia (=Michelia) champaca</i> (Bodhi Tree Water festival) | Magnoliaceae | Fl B |
| CHINA (People's Republic) | | 2019 April 29 (International Horticultural Exhibition) (Set/2) | | |
| 4611 | 80f | Roses, <i>Rosa</i> sp. (w/ emblem & Great Wall) | Rosaceae | Fl B |
| | | 2019 May 11 (Peonies) (Set/4) | | |
| 4616 | \$1.20 | Chinese Peony, <i>Paeonia lactiflora</i> | Paeoniaceae | Fl A |
| 4617 | \$1.20 | <i>Paeonia anomala</i> ssp. <i>veitchii</i> (= <i>P. veitchii</i>) | Paeoniaceae | Fl A |
| 4618 | \$1.20 | Japanese Pink Woodland Peony, <i>Paeonia obovata</i> | Paeoniaceae | Fl A |
| 4619 | \$1.20 | <i>Paeonia mairei</i> | Paeoniaceae | Fl A |
| COLOMBIA | | 2018 August 9 (Orchids) (MS/20) | | |
| 1489a | 500p | <i>Acineta antioquiiae</i> | Orchidaceae | Fl A |
| 1489b | 500p | <i>Anguloa uniflora</i> | Orchidaceae | Fl A |
| 1489c | 500p | <i>Coryanthes mastersiana</i> | Orchidaceae | Fl A |
| 1489d | 500p | <i>Coryanthes misasii</i> | Orchidaceae | Fl A |
| 1489e | 500p | <i>Epidendrum ciliare</i> | Orchidaceae | Fl A |
| 1489f | 500p | <i>Epidendrum fimbriatum</i> | Orchidaceae | Fl A |
| 1489g | 500p | <i>Epidendrum</i> sp. | Orchidaceae | Fl A |
| 1489h | 500p | <i>Erycina glossomystax</i> | Orchidaceae | Fl A |
| 1489i | 500p | <i>Gongora gratulabunda</i> | Orchidaceae | Fl A |
| 1489j | 500p | <i>Gongora gratulabunda</i> | Orchidaceae | Fl A |
| 1489k | 500p | <i>Gongora</i> sp. | Orchidaceae | Fl A |
| 1489l | 500p | <i>Lepanthes</i> sp. | Orchidaceae | Fl A |
| 1489m | 500p | <i>Odontoglossum gloriosum</i> | Orchidaceae | Fl A |
| 1489n | 500p | <i>Pescatoria pulvinaris</i> | Orchidaceae | Fl A |
| 1489o | 500p | <i>Platystele</i> sp. | Orchidaceae | Fl A |
| 1489p | 500p | <i>Pleurothallis gracilicolumna</i> | Orchidaceae | Fl A |
| 1489q | 500p | <i>Pleurothallis jaramilloi</i> | Orchidaceae | Fl A |
| 1489r | 500p | <i>Psychopsis krameriana</i> | Orchidaceae | Fl A |
| 1489s | 500p | <i>Stelis nanegalensis</i> | Orchidaceae | Fl A |
| 1489t | 500p | <i>Telipogon pulcher</i> | Orchidaceae | Fl A |
| | | 2018 August 17 (Norte Santander Department) (MS/6) | | |
| 1491b | 1000p | Pineapple cultivation, <i>Ananas comosus</i> | Bromeliaceae | Fr A MS |
| 1491c | 1000p | Pink Bean cultivation | Fabaceae | V A MS |
| CROATIA | | 2019 August 29 (National Parks & Flora) (Set/2) | | |
| 1138 | 8.60k | <i>Dianthus carthusianorum</i> (= <i>velebiticus</i>) (N. Velebit N.P., Croatia) | Caryophyllaceae | Fl B |
| 1139 | 8.60k | <i>Pinus pumila</i> (Seoraksan Natl Park, S. Korea) | Pinaceae | T B |
| CYPRUS | | 2019 March 28 (Old Trees) (Set/3) | | |
| 1309 | 34c | Sycamore, Oriental plane, <i>Platanus orientalis</i> | Platanaceae | T A |
| 1310 | 41c | Mediterranean Cypress, <i>Cupressus sempervirens</i> | Cupressaceae | T A |
| 1311 | 64c | Mount Atlas Mastic, <i>Pistacia atlantica</i> | Anacardiaceae | T A |
| DJIBOUTI | | 2019 March 14 (Orchids) (MS/4 & SS/1) | | |
| 1680a | 250fr | <i>Paphiopedilum hirsutissimum</i> | Orchidaceae | Fl A MS |
| 1680b | 250fr | <i>Brassavola nodosa</i> | Orchidaceae | Fl A MS |

DJIBOUTI (continued)

| | | | | |
|-------|-----------|---|-------------|---------|
| 1680c | 250fr | <i>Phalaenopsis</i> hybrid | Orchidaceae | Fl A MS |
| 1680d | 250fr | <i>Dendrobium kingianum</i> | Orchidaceae | Fl A MS |
| 1688 | SS 1000fr | <i>Phalaenopsis</i> 'Sogo Yukidan' | Orchidaceae | Fl A SS |
| | Margin | LL: <i>Dendrobium</i> 'Pompadour' | Orchidaceae | Fl Z SS |
| | | Bot: <i>Dendrobium</i> hybrid | Orchidaceae | Fl Z SS |
| | | LR: Bamboo Orchid, <i>Arundina graminifolia</i> | Orchidaceae | Fl Z SS |

ESTONIA**2019 March 28** (Liverwort) (Single)

| | | | | |
|-----|-----|------------------------------------|---------------|------|
| 891 | 65c | Liverwort, <i>Hepatica nobilis</i> | Ranunculaceae | Fl A |
|-----|-----|------------------------------------|---------------|------|

FIJI**2018 February 5** (2017 UN Climate Change Conference) (Set/4)

| | | | | |
|------|------|--|---------|-----|
| 1389 | 40c | People planting mangroves | | U B |
| 1390 | \$10 | Sugar Cane, <i>Saccharum officinarum</i> (w/ workers in field) | Poaceae | V B |

GERMANY**2019 July 1** (Flower Type of 2005) (Set/8) (perf 14)

| | | | | |
|------|------|--|----------------|------|
| 3103 | 60c | Cornflower, <i>Centaurea cyanus</i> | Asteraceae | Fl A |
| 3104 | 80c | Nasturtium, <i>Tropaeolum majus</i> | Tropaeolaceae | Fl A |
| 3105 | 95c | Knapweed, <i>Centaurea biebersteinii</i> | Asteraceae | Fl A |
| 3106 | 110c | Wild gladiolus, <i>Gladiolus palustris</i> | Iridaceae | Fl A |
| 3107 | 155c | Wood anemone, <i>Anemone nemorosa</i> | Ranunculaceae | Fl A |
| 3108 | 170c | Pansy, <i>Viola tricolor</i> | Violaceae | Fl A |
| 3109 | 190c | Snapdragon, <i>Antirrhinum majus</i> | Plantaginaceae | Fl A |
| 3110 | 270c | Hawkweed, <i>Pilosella aurantiaca</i> | Asteraceae | Fl A |

2019 (Flower Type of 2005) (6ea Bklt/10) (die cut 10) (s/a)

| | | | | |
|-------|------|--|---------------|------|
| 3111 | 60c | Cornflower, <i>Centaurea cyanus</i> | Asteraceae | Fl A |
| 3111a | | Bklt/10 (Sc#3111) | | |
| 3112 | 80c | Nasturtium, <i>Tropaeolum majus</i> | Tropaeolaceae | Fl A |
| 3112a | | Bklt/10 (Sc#3112) | | |
| 3113 | 95c | Knapweed, <i>Centaurea biebersteinii</i> | Asteraceae | Fl A |
| 3113a | | Bklt/10 (Sc#3113) | | |
| 3114 | 110c | Wild Gladiolus, <i>Gladiolus palustris</i> | Iridaceae | Fl A |
| 3114a | | Bklt/10 (Sc#3114) | | |
| 3115 | 155c | Wood Anemone, <i>Anemone nemorosa</i> | Ranunculaceae | Fl A |
| 3115a | | Bklt/10 (Sc#3115) | | |
| 3116 | 270c | Hawkweed, <i>Pilosella aurantiaca</i> | Asteraceae | Fl A |
| 3116a | | Bklt/10 (Sc#3116) | | |

GRENADA GRENADINES**2019 March 4** (Cacti) (MS/6)

| | | | | |
|-------|-----|---|-----------|---------|
| 3019a | \$2 | Turk's Cap, <i>Melocactus azureus</i> (flower in bloom) | Cactaceae | Fl A MS |
| 3019b | \$2 | Turk's Cap, <i>Melocactus azureus</i> (stem) | Cactaceae | V A MS |
| 3019c | \$4 | Strawberry Pear, <i>Hylocereus trigonus</i> (flower in bloom) | Cactaceae | Fl A MS |
| 3019d | \$4 | Strawberry Pear, <i>Hylocereus trigonus</i> (stem) | Cactaceae | V A MS |
| 3019e | \$6 | Prickly Pear, <i>Opuntia robusta</i> (flower in bloom) | Cactaceae | Fl A MS |
| 3019f | \$6 | Prickly Pear, <i>Opuntia robusta</i> (stem) | Cactaceae | V A MS |

IRAQ**2019 May 21** (2019 International Flower Festival) (Set/2)

| | | | | |
|------|--|--|--|--------|
| 2060 | | U/I flowers (w/ butterflies on pink bkgrd) | | Fl U B |
| 2061 | | U/I flowers (w/ butterflies on light orange bkgrd) | | Fl U B |

ISRAEL**2019 July 16** (50th anniv. Diplomatic Relations w/ Singapore) (Set/2)

| | | | | |
|------|-------|---|---------------|------|
| 2222 | 2.50s | Flowers of Singapore: <i>Bougainvillea glabra</i> | Nyctaginaceae | Fl B |
| | | <i>Dendrobium lucian</i> & <i>D. crumenatum</i> | Orchidaceae | Fl B |
| | | <i>Ixora congesta</i> | Rubiaceae | Fl B |

ISRAEL (continued)

| | | | | |
|------|-------|---|----------------|------|
| 2223 | 7.40s | Flowers of Israel: <i>Anemone coronaria</i> ; | Ranunculaceae | Fl B |
| | | <i>Cyclamen persicum</i> | Primulaceae | Fl B |
| | | <i>Senecio glaucus</i> | Asteraceae | Fl B |
| | | <i>Narcissus tazetta</i> | Amaryllidaceae | Fl B |

LITHUANIA**2019 April 26 (Flower) (Single)**

| | | | | |
|------|-----|------------------------------------|----------------|------|
| 1149 | 84c | Wild Garlic, <i>Allium ursinum</i> | Amaryllidaceae | Fl A |
|------|-----|------------------------------------|----------------|------|

MOLDOVA**2019 May 7 (Waterlilies) (Set/3)**

| | | | | |
|------|-------|--|--------------|------|
| 1033 | 25b | Pond Lily, <i>Nuphar lutea</i> | Nymphaeaceae | Fl A |
| 1034 | 1l | Rose Arey Waterlily, <i>Nymphaea</i> 'Rose Arey' | Nymphaeaceae | Fl A |
| 1035 | 5.75l | White Waterlily, <i>Nymphaea alba</i> | Nymphaeaceae | Fl A |

MONGOLIA**2019 July 29 (50th anniv. Diplomatic Relations w/ Turkey) (SS/2)**

| | | | | |
|-------|----------|--|----------------|------|
| C191a | SS 2500t | Tulip, <i>Tulipa</i> sp. (w/ Mongolian Airlines jet) | Liliaceae | Fl B |
| C191b | SS 2500t | Scabiosa, <i>Scabiosa comosa</i> (w/ Turkish Airlines jet) | Caprifoliaceae | Fl B |

MONTENEGRO**2019 February 8 (Mimosa Festival) (Single)**

| | | | | |
|-----|-----|---------------------------------|----------|------|
| 439 | 50c | Mimosa, <i>Acacia pycnantha</i> | Fabaceae | Fl A |
|-----|-----|---------------------------------|----------|------|

MOROCCO**2019 April 16 (Lemon Scented) (Set/2)**

| | | | | |
|------|-------|--|----------|---------|
| 1267 | 3.75d | Lemon blossoms, <i>Citrus limon</i> (w/ bee) | Rutaceae | Fl B |
| 1268 | 9d | Lemons & blossoms, <i>Citrus limon</i> | Rutaceae | Fl Fr A |

OMAN**2013 January 8 (Omani Environment Day) (Set/4)**

| | | | | |
|-----|------|---|---------------|------|
| 532 | 50b | Desert Rose, <i>Adenium obesum</i> | Apocynaceae | Fl A |
| 533 | 100b | <i>Cistanche tubulosa</i> | Orobanchaceae | Fl A |
| 534 | 200b | Wild Almond, <i>Prunus (=Amygdalus) arabica</i> | Rosaceae | Fl A |
| 535 | 250b | <i>Jurinea (=Aegopordon) berardoides</i> | Asteraceae | Fl A |

POLAND**2019 June 25 (Clematis Varieties) (MS/4)**

| | | | | |
|-------|-------|--|---------------|---------|
| 4428a | 3.30z | General Sikorski, <i>Clematis</i> 'General Sikorski' | Ranunculaceae | Fl A MS |
| 4428b | 3.30z | Cardinal Wyszynski, <i>Clematis</i> 'Cardinal Wyszynski' | Ranunculaceae | Fl A MS |
| 4428c | 3.30z | Solidarity, <i>Clematis</i> 'Solidarity' | Ranunculaceae | Fl A MS |
| 4428d | 3.30z | Marie Sklodowska-Curie, <i>Clematis</i> 'Marie Sklodowska-Curie' | Ranunculaceae | Fl A MS |

2019 June 28 (Garlic) (Single)

| | | | | |
|------|----|-------------------------------|----------------|-----|
| 4431 | 6z | Garlic, <i>Allium sativum</i> | Amaryllidaceae | V A |
|------|----|-------------------------------|----------------|-----|

RUSSIA**2019 June 28 (Bellflower Varieties) (Block/4)**

| | | | | |
|-------|-----|-------------------------------|---------------|------|
| 8035a | 45r | <i>Campanula bononiensis</i> | Campanulaceae | Fl A |
| 8035b | 45r | <i>Campanula persicifolia</i> | Campanulaceae | Fl A |
| 8035c | 45r | <i>Campanula ciliata</i> | Campanulaceae | Fl A |
| 8035d | 45r | <i>Campanula pendula</i> | Campanulaceae | Fl A |
| 8035 | | Block/4 (Sc#8035a-d) | | |

2019 July 15 (Grape Harvest) (Horiz Pair)

| | | | | |
|-------|-----|---|----------|------|
| 8038a | 45r | Floral Grapes, <i>Vitis vinifera</i> | Vitaceae | Fr B |
| 8038b | 45r | Ruby Kaliskin Grapes, <i>Vitis vinifera</i> | Vitaceae | Fr B |

SURINAM**2018 November 14 (Fruit) (Block/6)**

| | | | | |
|-------|------|---|----------------|------|
| 1544a | \$! | Pineapple, <i>Ananas comosus</i> | Bromeliaceae | Fr A |
| 1544b | \$14 | Orange, <i>Citrus sinensis</i> | Rutaceae | Fr A |
| 1544c | \$20 | Sapodilla, <i>Manilkara zapota</i> | Sapotaceae | Fr A |
| 1544d | \$21 | Mace, <i>Myristica fragrans</i> | Myristicaceae | Fr A |
| 1544e | \$24 | Passion Fruit, <i>Passiflora edulis</i> | Passifloraceae | Fr A |
| 1544f | \$25 | Pomegranate, <i>Punica granatum</i> | Punicaceae | Fr A |

| | | | | |
|--------------------------------|-----------|---|---------------|---------|
| SWITZERLAND | | 2019 September 5 (Beer) (Horiz Pair) | | |
| 1735 | 100c | Hops, <i>Humulus lupulus</i> (w/ lager beer in mug) | Cannabaceae | Fl B |
| 1736 | 100c | Hops, <i>Humulus lupulus</i> (w/ dark beer in glass) | Cannabaceae | Fl B |
| 1736a | | Horiz Pair (Sc#1735–36) | | |
| UNITED NATIONS | | 2019 May 20 (World Bee Day) (SS/1) | | |
| 1216 | SS \$3 | <i>Corydalis flavula</i> (w/ Diphaglossine Bee) | Papaveraceae | Fl B SS |
| UNITED NATIONS (Geneva) | | 2019 May 20 (World Bee Day) (SS/1) | | |
| 667 | SS 2.60fr | <i>Lobelia cardinalis</i> (w/ Bumblebee) | Campanulaceae | Fl A SS |
| UNITED NATIONS (Vienna) | | 2019 May 20 (World Bee Day) (SS/1) | | |
| 638 | SS € 2.70 | <i>Scutellaria lateriflora</i> (w/ Long-horned Bee) | Lamiaceae | Fl A SS |
| UNITED STATES | | 2019 September 17 (Winter Berries) (Block/4 & Bklt/20) | | |
| 5415 | (55c) | Winterberry, <i>Ilex verticillata</i> | Aquifoliaceae | Fr A |
| 5416 | (55c) | Juniper Berry, <i>Juniperus communis</i> | Cupressaceae | Fr A |
| 5417 | (55c) | Beautyberry, <i>Callicarpa americana</i> | Lamiaceae | Fr A |
| 5418 | (55c) | Soapberry, <i>Sapindus saponaria</i> | Sapindaceae | Fr A |
| 5418a | | Block/4 (Sc#5415–18) | | |
| 5418b | | Bklt/20 (5ea Sc#5415–18) | | |

EMBROIDERED FLOWERS

On 19 July 2005, Austria Post issued one of their innovative (some call them “oddball”) stamps. This one was an embroidered image of an Edelweiss flower (*Leontopodium nivale*) (Sc#2019). The stamp was issued in honor of the Austrian embroidery industry, which dates back to the eighteenth century. The stamp has a self-adhesive backing, but can even be worn on clothing, if so desired. It was made in Lustenau, the center of the Vorarlberg embroidery industry.

Austria followed this with another embroidered flower on 19 September 2008, depicting a Clusius Gentian (*Gentiana clusii*) (Sc#2175). A third embroidered flower (a rose) appeared on a Petit Point stamp issued on 17 September 2010 (Sc#2278).

Other embroidered stamps from Austria featured a Dirndl in 2016 (Sc#2632), this one in the actual shape of the traditional dress, and a Styrian Hat in 2018 (Sc#2757).

Austria has experimented with several other media to produce their postage stamps. One featured a Rose silkscreened on a Porcelain tile issued in 2014 (Sc#2492). Another has an image screen printed on the back of an actual piece of Glass issued in 2016 (Sc#2620).

In 2015, they issued a stamp printed on a piece of Leather shaped like a pair of lederhosen pants with crystal buttons affixed (Sc#2580).

They have affixed Swarovski crystals to several other issues (Sc#1966, Sc#2161, Sc#2703–05) as well as Glass Beads (Sc#2060).

Other embroidered stamps have been issued by Switzerland in 2000 (Sc#1075), Gambia in 2003 (Sc#2731), Grenada in 2003 (Sc#3353), Grenada Grenadines in 2003 (Sc#2461), St. Vincent in 2003 (Sc#3095), Sierra Leone in 2003 (Sc#2598), Italy in 2004 (Sc#2624), Singapore in 2009 (Sc#1372), Brazil in 2010 (Sc#3146), and Micronesia in 2011 (Sc#959).



NEW PLANTS IN THE PHILATELIC HERBARIUM

Christopher E. Dahle, BU1269

Billbergia pyramidalis. BROMELIACEAE

Common name: Flaming Torch

Terrestrial or epiphytic perennial, 0.5–1 m. Leaves form water-containing rosette where detritus and insects gather, providing nourishment. Erect flower head has red flowers tipped in violet appearing in summer. Originates in southern Brazil. Prefers moist humus-rich soils protected from frost and drought.

Antigua Sc#3434f. Issued in a MS/6 of Tropical Flowers on 1 November 2018.



Clematis smilacifolia RANUNCULACEAE

Woody, branched tropical vine. Simple leaves 8–16 × 6.5–11 cm. Flowers 3–3.6 cm diameter. Found in forest margins and scrub at elevations 900–2,300 m. Range from southern China to Bangladesh, Bhutan, Cambodia, Malaysia, India, Indonesia, New Guinea, Philippines, Thailand, Sri Lanka, and Vietnam.



Myanmar (Burma) Sc#443. Issued for the month of Pyatho on 6 January 2019, the first in a series of seasonal stamps. Designed by Wai Zin Paing. Printed by offset in four colors at Security Printing Works (Myanmar) with a print run of 150,000.

Butea monosperma FABACEAE

Common name: Flame of the Forest, Bastard Teak

Medium-sized dry-season deciduous tree to 12–15 m. Leathery compound trifoliate leaves to 25–40 cm. Leaves drop then orange or salmon-colored flowers appear January–March on racemes 15 cm long. The tree is sacred in Hinduism and Buddhism. It has many medicinal uses. Grows in open grasslands or mixed forest in tropical and subtropical parts of the Indian Subcontinent and Southeast Asia.



Myanmar (Burma) Sc#444. Issued 5 February 2019, for the month of Tabodwe, second in the series of seasonal stamps designed by Wai Zin Paing.



Acineta antioquiae ORCHIDACEAE

Epiphytic herbaceous perennial. Pendulous flowers in spring-summer. Grow in canopy of montane forest. Native to Department of Antioquia in Colombia.

Colombia Sc#1289a. Issued on 9 August 2018, in a sheet of 20 of Endemic Orchids of Colombia. Printed by Cartor Security Printing in a run of 293,060.



Coryanthes mastersiana ORCHIDACEAE

Epiphytic herb growing in ant gardens in trees. Summer flowering. Bucket-shaped flowers trap pollinators, which are specific to Euglossine bees. Produce a rare fragrance that attracts only two species of bees. Native to lowland forests and mangrove swamps of the Chocó region and the Cauca Valley in Colombia and in NW Ecuador at elevations of 400–570 m.

Colombia Sc#1489c. Issued 9 August 2018, in a sheet of 20 Endemic Orchids of Colombia.



***Coryanthes misasii* ORCHIDACEAE**

Epiphytic herb with fragrant purple-spotted yellow bucket-shaped flowers. Grows in Antioquia Department in Colombia at 600–800 m.

Colombia Sc#1489d. Issued 9 August 2018, in a sheet of 20 Endemic Orchids of Colombia.



***Erycina glossomystax* ORCHIDACEAE**

Synonyms: *Oncidium articulatum*, *Oncidium glossomystax*, *Psydorchis glossomystax*

Tiny epiphytic herbaceous plant that grows on leaves, bloom winter-summer. Origin: Mexico, Guatemala, Colombia, Venezuela, Ecuador, Brazil, Bolivia, and Peru at elevations 230–1,410 m.

Colombia Sc#1489h. Issued 9 August 2018, in a sheet of 20 Endemic Orchids of Colombia.



***Gongora gratulabunda* ORCHIDACEAE**

Synonym: *Gongora hennisiana*

Medium-sized herbaceous epiphytic perennial. Each pseudobulb has two leaves and produces 13 inflorescences with 10–12 pendent yellow flowers, 3.75 cm, with purple spots, that open simultaneously in autumn. Pollinated by male Euglossine bees. Fragrant. Native to Ecuador, Colombia, and Peru around elevations of 850 m.

Colombia Sc#1489i. Issued 9 August 2018, in a sheet of 20 Endemic Orchids of Colombia.



***Pescatoria pulvinaris* ORCHIDACEAE**

Common name: Cushion-like Pescatoria

Synonyms: *Bollea pulvinaris*, *Zygopetalum pulvinare*

Pescatorea is a spelling variation. Medium sized, epiphyte without pseudobulbs. 6–10 lanceolate leaves to 60 cm form a rosette. Blooms in spring. Flower purple, 6.25 cm, on peduncle 10–15 cm. Found in Antioquia Department of Colombia at 1,200–2,000 m.

Colombia Sc#1489n. Issued 9 August 2018, in a sheet of 20 Endemic Orchids of Colombia.



***Pleurothallis gracilicolumna* ORCHIDACEAE**

New species 2018.

Small herbaceous plant to 25 cm without pseudobulbs. Leaves leathery, fleshy 9–13 × 1.8 cm. Single peduncle, flowers 29 mm, green and purple. Found in Quinalto, Department of Colombia.

Colombia Sc#1489p. Issued 9 August 2018, in a sheet of 20 Endemic Orchids of Colombia.



***Pleurothallis jaramilloi* ORCHIDACEAE**

Synonyms: *Acronia jaramilloi*, *Zosterophyllanthros jaramilloi*

Medium sized terrestrial herb. Blooms late winter and spring through 1–1.5 cm long sheath. Purple flowers 1 cm. Found in the Santander region of Colombia.

Colombia Sc#1489q. Issued 9 August 2018, in a sheet of 20 Endemic Orchids of Colombia.



***Stelis nanegalensis* ORCHIDACEAE**

Synonym: *Stelis vulcanica*

Small to medium sized epiphyte with ramicauls bearing 2–3 leaves. Erect many-flowered inflorescence, 25 cm, in winter and spring has yellow flowers 1.25 cm. Found in Nicaragua, Panama, Venezuela, Colombia, and Ecuador at elevation around 300 m.

Colombia Sc#1489s. Issued 9 August 2018, in a sheet of 20 Endemic Orchids of Colombia.

Jurinea berardioides ASTERACEAESynonyms: *Aegopordon berardioides*, *Derderia berardioides*

Biennial xerophytic herb. Leaves 7–10 cm densely tomentose. Three to five flower heads, 2–3 cm, pink in April and May. Found in Pakistan, Iran, Arabian Peninsula, Afghanistan, and India.

Oman Sc#535. Issued 8 Jan. 2013 in a set of 4 for Omani Environment Day. Printed by Cartor Security Printers.

***Citrus australasica*** RUTACEAE

Common name: Finger Lime, Caviar Lime

Synonyms: *Citrus australasica* var. *sanguinea*, *Microcitrus australasica*

Shrub to 6 m with spines to 2.5 cm. Leaves, 1–6 cm × 3–25 mm have aromatic oil glands. White flowers, with petals 6–9 mm, in late autumn to summer. Cylindrical fruit, 4–8 cm are green, yellow, black, brown, or purple with green, yellow, or pink flesh. Found in tropical to subtropical rainforests in southeastern Queensland and northern New South Wales.

Australia Sc#5004 & 5007. Issued 13 August 2019, in Bush Citrus set of three, perforated 14×14¾, as a SS/3 and in self-adhesive coils with die cuts of 11¼. Illustrated by Anita Xhafer and designed by Jo Mure of Australia Postage Design Studio. Printed by offset lithography on Tullis Russell paper by EGO.

***Acronychia acidula*** RUTACEAE

Common name: Lemon Aspen, Hard Aspen, Lemonwood

Synonyms: *Acronychia superba*, *Jambolifera acidula*

Tree, 4–15 m. Leaves dark green, elliptical to 25 mm. Small yellow flowers in summer to autumn. Fruit, 1.5–2.5 cm pale yellow or green with small black seeds. Found in rainforest in coastal areas from central to northern Queensland.

Australia Sc#5005 & 5008. Issued 13 Aug. 2019 in Bush Citrus set.

***Intsia bijuga*** FABACEAE

Common names: Johnstone River Teak, Pacific Teak, Scrub Mahogany

Synonyms: 21 synonyms.

Tree to 35 m. Shiny leaves paripinnate with 1–6 leaflets and semi-deciduous. Produces white flowers in dense terminal pannicles and oblong or pear-shaped fruit 8–23 cm × 4–8 cm throughout the year. Grown for timber and as an ornamental. Found on sand and coral beaches up to 600 m. Native to the Indo-Pacific. Ranges from Madagascar east through India and Australia to Fiji and Samoa.

British Indian Ocean Territory Sc#488c. Issued 2 May 2018, in a MS/6 flowers

***Centaurea biebersteinii*** ASTERACEAE

Common name: Knapweed, Spotted Knapweed, Flockenblume

Synonyms: *Centaurea biebersteinii* ssp. *biebersteinii*

Perennial or biennial herb to 60 cm. Leaves 10–15 cm deeply lobed, resinous. Flowers pink or white in summer. Pioneer species on stream banks, roadsides, old fields, and other disturbed areas. Native to Europe. Invasive in North America.

Germany Sc#3105, 3113, 3113a. Issued 1 July 2019, as a definitive in the Flowers series in sheet perforated 14, and in self-adhesive format die cut 10. Designed by Stefan Klein and Olaf Neumann of KommunikationsDesign in Iserlohn. Printed in multicolor offset by Bundesdruckerei GmbH, Berlin on coated white and fluorescent DP II postage paper.



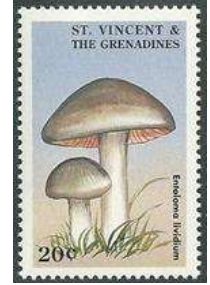


FUNGI

Editor

Dr. Paul A. Mistretta, BU1681

New Listings



Scott# Denom Common Name/Scientific Name Family Code
 [Ed. Note: Occasionally in this section and also in the Herpetology section, we will note a species that is known to be poisonous by marking it with a (☠) symbol. One should not infer that other species that are not so marked are non-poisonous or safe to handle/eat.]

DJIBOUTI

2019 February 27 (Mushrooms) (MS/4 & SS/1)

| | | | | |
|-------|----------|--|-------------|---|
| 1626a | 240fr | Parasol Mushroom, <i>Macrolepiota procera</i> | Boletaceae | A |
| 1626b | 240fr | Red-capped Scaber Stalk, <i>Leccinum aurantiacum</i> | Boletaceae | A |
| 1626c | 240fr | Penny Bun or Cep or Porcini, <i>Boletus edulis</i> | Boletaceae | A |
| 1626d | 240fr | False Saffron Milkcap or Orange Milkcap, <i>Lactarius deterrimus</i> | Russulaceae | A |
| | Margin | Bot: Penny Bun, <i>Boletus edulis</i> (w/ squirrels) | Boletaceae | Z |
| 1636 | SS 950fr | <i>Leccinum versipelle</i> | Boletaceae | A |
| | Margin | Bot: Red-capped Scaber Stalk, <i>Leccinum aurantiacum</i> | Boletaceae | Z |

GREAT BRITAIN

2019 October 10 (*The Gruffalo*) (SS/4)

| | | | | |
|-----|-----------|--|-------------|-----|
| N/A | SS Margin | LL: Stylized <i>Amanita muscaria</i> -like cartoon | Amanitaceae | S Z |
| | | LR: Stylized mushrooms | | S Z |

JAPAN

2019 October 23 (Gifts from the Forest) (2ea MS/10)

| | | | | |
|---|-----|---|----------------|-----|
| a | 63¥ | Stylized mushrooms | | S |
| e | 84¥ | Generic mushrooms: possibly? <i>Hygrophorus</i> sp. | Hygrophoraceae | U A |

ST. PIERRE & MIQUELON

2018 November 8 (Mushrooms) (Single)

| | | | | |
|------|-----|---|--------------|---|
| 1067 | 95c | Scotch Bonnet, <i>Marasmius oreades</i> | Marasmiaceae | A |
|------|-----|---|--------------|---|

ST. THOMAS & PRINCE ISLANDS

2017 March 13 (Mushrooms) (MS/4 & SS/1)

| | | | | |
|-------|------------|--|-----------------|---|
| 3253a | 31000d | Common Morel, <i>Morchella esculenta</i> | Morchellaceae | A |
| 3253b | 31000d | Red-capped Scaber Stalk, <i>Leccinum aurantiacum</i> var. <i>quercinum</i> | Boletaceae | A |
| 3253c | 31000d | Brain Mushroom, <i>Gyromitra esculenta</i> | Discinaceae | A |
| 3253d | 31000d | Chanterelle, <i>Cantharellus cibarius</i> | Cantharellaceae | A |
| 3272 | SS 124000d | Oyster Mushroom + 4; 68-3 | Pleurotaceae | A |
| | Margin | Bot: Red-capped Scaber Stalk, <i>Leccinum aurantiacum</i> | Boletaceae | Z |

SERBIA

2019 March 7 (Mushrooms) (Block/4)

| | | | | |
|------|-----|---|-----------------|---|
| 849a | 50d | no common name, <i>Psilocybe serbica</i> | Strophariaceae | A |
| 849b | 50d | Truffle, <i>Tuber petrophilum</i> | Tuberaceae | A |
| 849c | 50d | Magpie Fungus, <i>Coprinopsis picacea</i> | Psathyrellaceae | A |
| 849d | 50d | no common name, <i>Octospora pannosa</i> sp. nov. | Pyronemataceae | A |

SIERRA LEONE

2018 January 30 (Mushrooms) (MS/4 & SS/1)

| | | | | |
|-------|------------|---|----------------|---|
| 4625a | 9800le | Satan's Bolete, <i>Rubroboletus satanas</i> | Boletaceae | A |
| 4625b | 9800le | Gypsy Mushroom, <i>Cortinarius caperatus</i> | Cortinariaceae | A |
| 4625c | 9800le | Larch Bolete, <i>Suillus grevillei</i> | Suillaceae | A |
| 4625d | 9800le | Penny Bun or Cep or Porcini, <i>Boletus edulis</i> | Boletaceae | A |
| 4645 | SS 40000le | The Wood Mushroom, <i>Agaricus silvicola</i> | Agaricaceae | A |
| | Margin | R: Red-capped Scaber Stalk, <i>Leccinum aurantiacum</i> | Boletaceae | Z |



MAMMALIA

Editor

Michael Prince, LM68



New Listings

| Scott# | Denom | Common Name/Scientific Name | Family/Subfamily | Code |
|---|----------|---|------------------|---------|
| ANGOLA 2019 May 15 (African Flags & Animals) (Set/4 & SS/1) | | | | |
| 1616 | 300k | Plains Zebra, <i>Equus quagga</i> | Equidae | A |
| 1617 | 300k | African Bush Elephant, <i>Loxodonta africana</i> | Elephantidae | A |
| 1619 | 300k | Lion, <i>Panthera leo</i> | Felidae | A |
| 1698 | SS 1200k | Sable Antelope, <i>Hippotragus niger</i> | Bovidae | A |
| | Margin | UL: African Bush Elephant, <i>Loxodonta africana</i> | Elephantidae | Z |
| ARGENTINA 2019 January 28 (Landmarks & Wildlife of South Atlantic Area) (Set/4) | | | | |
| 2863 | 180p | Leopard Seal, <i>Hydrurga leptonyx</i> | Phocidae | A |
| AUSTRALIA 2019 March 5 (Australian Animals) (Set/4, Coil Strip/4, Bklt/10) | | | | |
| 4941 | \$1 | Red Kangaroo, <i>Macropus rufus</i> (perf 14×14¾) | Macropodidae | A |
| 4942 | \$1 | Tasmanian Devil, <i>Sarcophilus harrisii</i> (perf 14×14¾) | Dasyuridae | A |
| 4945 | \$1 | Red Kangaroo, <i>Macropus rufus</i> (die cut 11¼) | Macropodidae | A |
| 4945a | | Bklt/10 (Sc#4945) | | |
| 4946 | \$1 | Tasmanian Devil, <i>Sarcophilus harrisii</i> (die cut 11¼) | Dasyuridae | A |
| 4946a | | Bklt/10 (Sc#4946) | | |
| 4946b | | Coil Strip/4 (Sc#4944–47) | | |
| AUSTRIA 2019 March 29 (Wild Boar) (Single) | | | | |
| 2787 | 270c | Wild Boar, <i>Sus scrofa</i> | Suidae | A |
| BAHAMAS 2019 April 18 (Bahamas Marine Mammal Research Org) (Set/4) | | | | |
| 1487 | 15c | Melon-headed Whale, <i>Peponocephala electra</i> | Delphinidae | A |
| 1488 | 50c | West Indian Manatee, <i>Trichechus manatus</i> | Trichechidae | A |
| 1489 | 65c | Orca (Killer Whale), <i>Orcinus orca</i> | Delphinidae | A |
| 1490 | 70c | Cuvier's Beaked Whale, <i>Ziphius cavirostris</i> | Ziphiidae | A |
| BELGIUM 2019 March 18 (Pollinators) (MS/5) | | | | |
| 2891b | (€1.84) | North American Long-nosed Bat, <i>Leptonycteris yerbabuenae</i> | Phyllostomidae | A |
| 2891e | (€1.84) | Honey Possum, <i>Tarsipes rostratus</i> | Tarsipedidae | (new) A |
| COLOMBIA 2019 April 5 (Colombian Parks) (MS/10) | | | | |
| 1502a | 5000p | Spectacled Bear, <i>Tremarctos ornatus</i> | Ursidae | A |
| 1502i | 5000p | Puma, <i>Puma concolor</i> | Felidae | A |
| ISRAEL 2019 May 1 (Endangered Animals) (Horiz Strip/3) | | | | |
| 2220a | 2.50s | Long-eared Hedgehog, <i>Hemiechinus auritus</i> | Erinaceidae | A |
| 2220b | 2.50s | Forest Dormouse, <i>Dryomys nitedula</i> | Gliridae | A |
| 2220c | 2.50s | Rüppell's Fox, <i>Vulpes rueppelli</i> | Canidae | A |
| 2019 July 16 (Tourism) (Set/3) | | | | |
| 2224 | 2.50s | Dromedary, <i>Camelus dromedarius</i> | Camelidae | A |
| KAZAKHSTAN 2019 April 25 (Otter) | | | | |
| 887 | 500te | European Otter, <i>Lutra lutra</i> | Mustelidae | A |

MALAWI**2018 October 2** (Translocation of Elephants) (MS/6 & 6ea SS/1)

| | | | | |
|------|---------|--|--------------|---|
| 870a | 700k | African Bush Elephant, <i>Loxodonta africana</i> (helicopter arrive) | Elephantidae | A |
| 870b | 700k | Same species (ropes wrapped on tusks) | Elephantidae | A |
| 870c | 700k | Same species (man pulling on tusks) | Elephantidae | A |
| 870d | 700k | Same species (men pushing standing elephant) | Elephantidae | A |
| 870e | 700k | Same species (hanging from crane) | Elephantidae | A |
| 870f | 700k | Same species (men standing behind elephant) | Elephantidae | A |
| 871 | SS 450k | Same species (lying on ground) | Elephantidae | A |
| 872 | SS 450k | Same species (hanging from crane-off flatbed) | Elephantidae | A |
| 873 | SS 450k | Same species (hanging from crane-over flatbed w/ men) | Elephantidae | A |
| 874 | SS 450k | Same species (hanging from crane-over flatbed) | Elephantidae | A |
| 875 | SS 450k | Same species (detaching from crane) | Elephantidae | A |
| 876 | SS 450k | Same species (lying on flatbed) | Elephantidae | A |

2019 April 8 (Wildlife) (MS/6 & 6ea SS/1)

| | | | | |
|------|---------|--|----------------|---|
| 883a | 700k | White Rhinoceros, <i>Ceratotherium simum</i> | Rhinocerotidae | A |
| 883b | 700k | Lion, <i>Panthera leo</i> | Felidae | A |
| 883c | 700k | Leopard, <i>Panthera pardus</i> | Felidae | A |
| 883d | 700k | African Buffalo, <i>Syncerus caffer</i> | Bovidae | A |
| 883e | 700k | African Bush Elephant, <i>Loxodonta africana</i> | Elephantidae | A |
| 883f | 700k | Hippopotamus, <i>Hippopotamus amphibius</i> | Hippopotamidae | A |
| 884 | SS 450k | Black Rhinoceros, <i>Diceros bicornis</i> | Rhinocerotidae | A |
| 885 | SS 450k | Lion, <i>Panthera leo</i> | Felidae | A |
| 886 | SS 450k | Leopard, <i>Panthera pardus</i> | Felidae | A |
| 887 | SS 450k | African Buffalo, <i>Syncerus caffer</i> | Bovidae | A |
| 888 | SS 450k | African Bush Elephant, <i>Loxodonta africana</i> | Elephantidae | A |
| 889 | SS 450k | Hippopotamus, <i>Hippopotamus amphibius</i> | Hippopotamidae | A |

MOLDOVA**2019 April 11** (Endangered Animals) (Set/4)

| | | | | |
|------|-------|--|-----------|---|
| 1029 | 2l | Black-bellied Hamster, <i>Cricetus cricetus</i> | Muridae | A |
| 1030 | 9.50l | Speckled Ground Squirrel, <i>Spermophilus suslicus</i> | Sciuridae | A |

MOROCCO**2017 October 31** (Flora and Fauna) (Horiz Pair)

| | | | | |
|-------|----|---|---------|---|
| 1237b | 9d | Mhorr Gazelle, <i>Nanger dama</i> ssp. <i>mhorr</i> | Bovidae | A |
|-------|----|---|---------|---|

SIERRA LEONE**2018 January 30** (Pandas) (MS/4 & SS/1)

| | | | | |
|-------|------------|--|-----------|---|
| 4621a | 9800le | Red Panda, <i>Ailurus fulgens</i> (facing front) | Ailuridae | A |
| 4621b | 9800le | Giant Panda, <i>Ailuropoda melanoleuca</i> (adult) | Ursidae | A |
| 4621c | 9800le | Giant Panda, <i>Ailuropoda melanoleuca</i> (adult & cub) | Ursidae | A |
| 4621d | 9800le | Red Panda, <i>Ailurus fulgens</i> (facing R) | Ailuridae | A |
| 4641 | SS 40000le | Red Panda, <i>Ailurus fulgens</i> | Ailuridae | A |
| | Margin | R: Giant Panda, <i>Ailuropoda melanoleuca</i> | Ursidae | Z |

2018 February 27 (Polar Bear) (MS/4 & SS/1)

| | | | | |
|-------|------------|--|---------|---|
| 4665a | 9800le | Polar Bear, <i>Ursus maritimus</i> (walking R) | Ursidae | A |
| 4665b | 9800le | Same species (adult & cub) | Ursidae | A |
| 4665c | 9800le | Same species (walking forward) | Ursidae | A |
| 4665d | 9800le | Same species (in water) | Ursidae | A |
| 4684 | SS 40000le | Polar Bear, <i>Ursus maritimus</i> | Ursidae | A |
| | Margin | Bot: Same species | Ursidae | Z |

SIERRA LEONE**2018 February 27** (Whales) (MS/4 & SS/1)

| | | | | |
|-------|------------|---|-----------------|---|
| 4667a | 9800le | Sperm Whale, <i>Physeter macrocephalus</i> | Physeteridae | A |
| 4667b | 9800le | Orca (Killer Whale), <i>Orcinus orca</i> | Delphinidae | A |
| 4667c | 9800le | Narwhal, <i>Monodon monoceros</i> | Monodontidae | A |
| 4667d | 9800le | Beluga, <i>Delphinapterus leucas</i> | Monodontidae | A |
| 4686 | SS 40000le | Humpback Whale, <i>Megaptera novaeangliae</i> | Balaenopteridae | A |
| | Margin | Bot: Sperm Whale, <i>Physeter macrocephalus</i> | Physeteridae | Z |

2018 March 30 (Dugongs) (MS/4 & SS/1)

| | | | | |
|-------|------------|---|------------|---|
| 4716a | 9800le | Dugong, <i>Dugong dugon</i> (w/ remora) | Dugongidae | A |
| 4716b | 9800le | Same species (w/ three fish) | Dugongidae | A |
| 4716c | 9800le | Same species (w/ two fish) | Dugongidae | A |
| 4716d | 9800le | Same species (alone) | Dugongidae | A |
| 4735 | SS 40000le | Dugong, <i>Dugong dugon</i> | Dugongidae | A |
| | Margin | R: Same species | Dugongidae | Z |

2018 April 27 (Lions) (MS/4 & SS/1)

| | | | | |
|-------|------------|---|---------|---|
| 4743a | 9800le | Lion, <i>Panthera leo</i> (w/ children) | Felidae | A |
| 4743b | 9800le | Same species (w/ women) | Felidae | A |
| 4743c | 9800le | Same species (w/ man & woman) | Felidae | A |
| 4743d | 9800le | Same species (w/ cub) | Felidae | A |
| 4762 | SS 40000le | Lion, <i>Panthera leo</i> | Felidae | A |
| | Margin | Bot: Same species | Felidae | Z |

2018 April 27 (Tigers) (MS/4 & SS/1)

| | | | | |
|-------|------------|--|---------|---|
| 4744a | 9800le | Tiger, <i>Panthera tigris</i> ssp. <i>tigris</i> (blue panel at Top) | Felidae | A |
| 4744b | 9800le | Tiger, <i>Panthera tigris</i> ssp. <i>sondaica</i> (blue panel at Top) | Felidae | A |
| 4744c | 9800le | Tiger, <i>Panthera tigris</i> ssp. <i>sondaica</i> (blue panel at Bot) | Felidae | A |
| 4744d | 9800le | Tiger, <i>Panthera tigris</i> ssp. <i>tigris</i> (blue panel at Bot) | Felidae | A |
| 4763 | SS 40000le | Tiger, <i>Panthera tigris</i> ssp. <i>tigris</i> | Felidae | A |
| | Margin | R: Same species | Felidae | Z |

2018 April 27 (Dolphins) (MS/4 & SS/1)

| | | | | |
|-------|------------|--|-------------|---|
| 4746a | 9800le | Pacific White-sided Dolphin, <i>Lagenorhynchus obliquidens</i> | Delphinidae | A |
| 4746b | 9800le | Commerson's Dolphin, <i>Cephalorhynchus commersonii</i> | Delphinidae | A |
| 4746c | 9800le | White-beaked Dolphin, <i>Lagenorhynchus albirostris</i> | Delphinidae | A |
| 4746d | 9800le | Indo-Pacific Humpbacked Dolphin, <i>Sousa chinensis</i> | Delphinidae | A |
| 4765 | SS 40000le | Short-beaked Common Dolphin, <i>Delphinus delphis</i> | Delphinidae | A |
| | Margin | R: Same species | Delphinidae | Z |

2018 April 27 (Endangered Species) (MS/4 & SS/1)

| | | | | |
|-------|------------|--|--------------|---------|
| 4750a | 9800le | Western Gorilla, <i>Gorilla gorilla</i> | Hominidae | A |
| 4750c | 9800le | Narrow-ridged Finless Porpoise, <i>Neophocaena asiaorientalis</i> | Phocoenidae | (new) A |
| 4750d | 9800le | Hueglin's Gazelle, <i>Eudorcas tilonura</i> | Bovidae | (new) A |
| 4769 | SS 40000le | Huon Tree Kangaroo, <i>Dendrolagus matschiei</i> | Macropodidae | A |
| | Margin | R: Narrow-ridged Finless Porpoise, <i>Neophocaena asiaorientalis</i> | Phocoenidae | (new) A |

URUGUAY**2019 April 5** (Paysandú Tourism) (Horiz Pair)

| | | | | |
|-------|-----|--|-------------|---------|
| 2664a | 22p | South American Coati, <i>Nasua nasua</i> | Procyonidae | A |
| 2664b | 22p | Pantanal Cat, <i>Leopardus braccatus</i> | Felidae | (new) A |

ILLUSTRATED POSTAL CARD

I came across this postal card at a recent show. Of course, the hand-drawn pencil illustration of an owl caught my eye. It sort of looks like a Great Horned Owl (*Bubo virginianus*), which of course does not have any horns at all. They have tufts of feathers called plumicorns that make them look “horned.” The purpose of these is not fully understood, but one theory is that they serve as a visual cue in territorial and social interactions.

This card (UX27) was posted during World War I on 31 May 1917, at Great Lakes, Illinois. This was a post office servicing the U.S. Navy’s Great Lakes Naval Training Center (now Naval Station Great Lakes), which was then and is currently, the largest training facility in the Navy and the largest military installation in Illinois.

The sailor who presumably drew and sent the card only identifies himself as “John C.” The card is addressed to Miss Mabel McLoed in Rosedale, Kansas, a community near Kansas City.

The artist has included a variety of illustrations and comments on the card, possibly out of boredom since at the base of the card he writes, “This is all I’ve got to do tonight.”

He labels the primary illustration “Boiled Owl,” and then adds, “Picture of the ‘Chicken’ (we had for dinner.)”

Other drawings show a small squirrel in the upper left corner, a rattlesnake stretching along the left side, some musical bars in the upper right, a small drinking cup, a sunset, and a mysterious item that he labels, “guess what this is.” I have no clue.

Initially, I assumed that the addressee was perhaps the sailor’s girlfriend, but in small print he asks, “Are you and Fred engaged yet?” and nearby writes “I’m coming back in a week or so.” Due to the jumbled format, it is hard to tell if the two statements are directly related even if they are side-by-side, but it is fun to think that he is teasing her.

On the left side of the owl illustration, the writer adds a string of Morse code. This was a subject that all naval recruits were required to learn because it was then a primary means of communication between ships and remains an important backup method. The message is “Good Bye.”

An interesting relic of training camp correspondence.





ORNITHOLOGY

Editor

Glenn G. Mertz, BU1455

Corrections/Updates



ANGOLA – Vol. 68(2), p.122

Update: Sc#1555 should have had Vol. 68(2) following the species listing.

CENTRAL AFRICAN REPUBLIC – Vol. 67(3), p.212

Update: Titicaca Grebe should have had Vol. 67(2) following the species listing.

Update: Black-billed Mountain-Toucan should have had Vol. 67(2) following the listing.

DJIBOUTI – Vol. 67(3), p.212

Update: Sc#1333, should have had Vol. 67(1) following the listing for the bird at the bottom in the margin of Green-cheeked Parakeet SS.

DJIBOUTI – Vol. 66(2), p.141

Update: Sc#1029b should have been listed as **new** following the listing. Listed in “New Birds” in Vol. 66(3).

DJIBOUTI – Vol. 67(2), p.126

Update: Sc#1148 should have had Vol. 67(2) following the listing.

GHANA – Vol. 67(2), p.128

Update: Sc#2942 should have had Vol. 66(3) following the listing.

GRENADA – Vol. 67(2), p.129

Update: Sc#4233c should have had Vol. 66(3) following the listing.

GUYANA – Vol. 68(2), p.129

Correction: The souvenir sheets Sc#4588a&b have both stamps captioned as Speckled Tanagers, but Sc#4588a should be Spotted Tanager, *Tangara punctata* and Sc#4588b is the Speckled Tanager, *Tangara guttata*. See “New Birds in the Philatelic Aviary” Vol. 68(1) for the Speckled Tanager and Vol. 68(3) for the Spotted Tanager.

LATVIA – Vol. 67(1), p.41

Update: Sc#969, Little Crake, should have had Vol. 66(3) following the listing.

MALAWI – Vol. 68(1), p.39

Correction: In Vol. 68(1), Sc#856d, I listed African Yellow White-eye, *Zosterops senegalensis*, as it was first identified on Kjell Sharning’s website. On page 210, in Vol. 68(3), Chuck Braun, listed it as a White-eyed Slaty-Flycatcher, *Melaeornis fischeri*. Subsequently, Kjell Sharning reviewed the bird, and due to a lack of yellow shown on the bird depicted, determined the bird should be the White-eyed Slaty-Flycatcher, *Melaeornis fischer*, within the family of Muscicapidae. Please note the correction and update the listing on page 39, for Sc#856d.

NEVIS – Vol. 68(2), p.42

Update: Sc#1956, White-bellied Emerald, should have had Vol. 67(3) following the listing.

ST. THOMAS & PRINCE ISLANDS – Vol. 68(1), p.44

Update: Issue date of 2018 May 19, Western Kingbird, should have had Vol. 67(3) following the listing.

ST. THOMAS & PRINCE ISLANDS – Vol. 68(3), p.206

Update: Sc#3247a should have had been listed as **new**.

SIERRA LEONE – Vol. 67(1), p.42

Correction: Change Sc#3747 to Chestnut-and-black Weaver, *Ploceus n. castaneofuscus*, a ssp., instead of Black-chinned Weaver. I incorrectly listed the wrong species.

New Issues

| Scott# | Denom | Common Name/Scientific Name | Family/Subfamily | Code |
|--|-----------|--|------------------|------|
| ANDORRA (French) 2019 May 10 (Europa: National Birds) (Single) A | | | | |
| 806 | €1.30 | Rock Ptarmigan, <i>Lagopus muta</i> | Phasianidae | |
| AUSTRIA 2019 May 9 (Europa: National Birds) (Single) A | | | | |
| 2796 | 90c | White-tailed Eagle, <i>Haliaeetus albicilla</i> | Accipitridae | |
| AZERBAIJAN 2018 December 27 (Gara-Yaz State Reserve) (MS/6) A | | | | |
| 1214a | 20g | White-backed Woodpecker, <i>Dendrocopos leucotos</i> | Picidae | |
| 1214b | 20g | European Starling, <i>Sturnus vulgaris</i> | Sturnidae | |
| 1214c | 30g | Eurasian Blackbird, <i>Thrush merula</i> | Turdidae | |
| 1214d | 30g | Ring-necked Pheasant, <i>Phasianus colchicus</i> | Phasianidae | |
| 1214e | 60g | Hildebrandt's Starling, <i>Lamprotornis hildebrandti</i> | Sturnidae | |
| 1214f | 60g | Eurasian Hoopoe, <i>Upupa epops</i> | Upupidae | |
| CENTRAL AFRICAN REPUBLIC 2019 June 20 (Hornbills) (MS/4 & SS/1) A Z | | | | |
| N/A | 900fr | Southern Yellow-billed Hornbill, <i>Tockus leucomelas</i> | Bucerotidae | |
| N/A | 900fr | Knobbed Hornbill, <i>Rhyticeros cassidix</i> | Bucerotidae | |
| N/A | 900fr | Wreathed Hornbill, <i>Rhyticeros undulates</i> | Bucerotidae | |
| N/A | 900fr | Southern Ground-Hornbill, <i>Bucorvus leadbeateri</i> | Bucorvidae | |
| N/A | SS 3600fr | Rufous Hornbill, <i>Buceros hydrocorax</i> | Bucerotidae | |
| | Margin | R: Wrinkled Hornbill, <i>Rhabdotorrhinus corrugatus</i> | Bucerotidae | |
| 2019 July 24 (Bee-eaters) (MS/4 & SS/1) A Z | | | | |
| N/A | 850fr | Southern Carmine Bee-eater, <i>Merops nubicoides</i> | Meropidae | |
| N/A | 850fr | Green Bee-eater, <i>Merops orientalis</i> | Meropidae | |
| N/A | 850fr | Red-bearded Bee-eater, <i>Nyctyornis amictus</i> | Meropidae | |
| N/A | 850fr | White-throated Bee-eater, <i>Merops albicollis</i> | Meropidae | |
| N/A | SS 3300fr | European Bee-eater, <i>Merops apiaster</i> | Meropidae | |
| | Margin | L: Chestnut-headed Bee-eater, <i>Merops leschenaultia</i> | Meropidae | |
| 2019 July 24 (Sea Birds) (MS/4 & SS/1) A Z | | | | |
| N/A | 900fr | Common Murre, <i>Uria aalge</i> | Alcidae | |
| N/A | 900fr | Great Black-backed Gull, <i>Larus marinus</i> | Laridae | |
| N/A | 900fr | Sandwich Tern, <i>Thalasseus sandvicensis</i> | Laridae | |
| N/A | 900fr | Common Tern, <i>Sterna hirundo</i> | Laridae | |
| N/A | SS 3600fr | Blue-footed Booby, <i>Sula nebouxii</i> | Sulidae | |
| | Margin | L: Atlantic Puffin, <i>Fratercula arctica</i> | Alcidae | |
| 2019 July 24 (Sunbirds) (MS/4 & SS/1) A Z | | | | |
| N/A | 900fr | Plain-throated Sunbird, <i>Anthreptes malacensis</i> | Nectariniidae | |
| N/A | 900fr | Palestine Sunbird, <i>Cinnyris osea</i> | Nectariniidae | |
| N/A | 900fr | Purple Sunbird, <i>Cinnyris asiaticus</i> | Nectariniidae | |
| N/A | 900fr | Crimson Sunbird, <i>Aethopyga siparaja</i> | Nectariniidae | |
| N/A | SS 3600fr | Greater Double-collared Sunbird, <i>Cinnyris afer</i> | Nectariniidae | |
| | Margin | L: Southern Double-collared Sunbird, <i>Cinnyris chalybeus</i> | Nectariniidae | |
| CROATIA 2019 May 9 (Europa: National Birds) (Set/2) A | | | | |
| 1118 | 8.60k | Bank Swallow, <i>Riparia riparia</i> | Hirundinidae | |
| 1119 | 8.60k | Yellow-legged Gull, <i>Larus michahellis</i> | Laridae | |
| CYPRUS 2019 May 2 (Europa: National Birds) (Set/2 & Bklt/8) A | | | | |
| 1313 | 41c | Griffon Vulture, <i>Gyps fulvus</i> | Accipitridae | |
| 1314 | 64c | Bonelli's Eagle, <i>Aquila fasciata</i> | Accipitridae | |
| 1314a | | Bklt/8 (4ea Sc#1313-14) | | |

DJIBOUTI**2019 February 27** (50th anniv. Apollo 11) (MS/4)**C**d 240fr Bald Eagle, *Haliaeetus leucocephalus* (patch emblem) Accipitridae**2019 June 12** (Extinct Species) (MS/4 & SS/1)**A Z**a 250fr †Jamaican Red Macaw, *Ara gossei* Psittacidaeb 250fr †Eskimo Curlew, *Numenius borealis* ScolopacidaeN/A SS 1000fr †Passenger Pigeon, *Ectopistes migratorius* ColumbidaeMargin L & Top: †Carolina Parakeet, *Conuropsis carolinensis* Psittacidae

Vol. 68(3)

2019 June 12 (Hornbills) (MS/4 & SS/1)**A Z**a 250fr Knobbed Hornbill, *Rhyticeros cassidix* Bucerotidaeb 250fr Great Hornbill, *Buceros bicornis* Bucerotidaec 250fr Northern Red-billed Hornbill, *Tockus erythrorhynchus* Bucerotidaed 250fr Oriental Pied-Hornbill, *Anthracoceros albirostris* BucerotidaeN/A SS 1000fr Southern Yellow-billed Hornbill, *Tockus leucomelas* BucerotidaeMargin Top: Great Hornbill, *Buceros bicornis* Bucerotidae**2019 June 12** (Hummingbirds) (MS/4 & SS/1)**A Z**a 250fr Glittering-bellied Emerald, *Chlorostilbon lucidus* Trochilidaeb 250fr Bee Hummingbird, *Mellisuga helenae* Trochilidaec 250fr Anna's Hummingbird, *Calypte anna* Trochilidaed 250fr Ruby-throated Hummingbird, *Archilochus colubris* TrochilidaeN/A SS 1000fr Anna's Hummingbird, *Calypte anna* TrochilidaeMargin Top: Allen's Hummingbird, *Selasphorus sasin* Trochilidae**2019 June 12** (Raptors) (MS/4 & SS/1)**A Z**a 250fr Tawny Eagle, *Aquila rapax* Accipitridaeb 250fr Osprey, *Pandion haliaetus* Pandionidaec 250fr Black Kite, *Milvus migrans* Accipitridaed 250fr Greater Spotted Eagle, *Clanga clanga* AccipitridaeN/A SS 1000fr Imperial Eagle, *Aquila heliaca* AccipitridaeMargin Top: Spanish Eagle, *Aquila adalberti* Accipitridae**2019 July 27** (Endangered Species) (MS/4)**A Z**b 250fr Whooping Crane, *Grus americana* Gruidae

Margin UL: Same species Gruidae

2019 July 27 (Parrots) (MS/4 & SS/1)**A Z**a 250fr Blue-and-yellow Macaw, *Ara ararauna* Psittacidaeb 250fr Hyacinth Macaw, *Anodorhynchus hyacinthinus* Psittacidaec 250fr Gray Parrot, *Psittacus erithacus* Psittacidaed 250fr Cockatiel, *Nymphicus hollandicus* CacatuidaeMargin Bkgrd: Blue-and-yellow Macaw, *Ara ararauna* PsittacidaeN/A SS 1000fr Rose-ringed Parakeet, *Psittacula krameri* PsittaculidaeMargin R: Blue-and-yellow Macaw, *Ara ararauna* Psittacidae**2019 July 27** (Owls) (MS/4 & SS/1)**A Z**a 250fr Pacific Pygmy-Owl, *Glaucidium californicum* Strigidaeb 250fr Spotted Eagle-Owl, *Bubo africanus* Strigidaec 250fr Eastern Screech-Owl, *Megascops asio* Strigidaed 250fr Barred Eagle-Owl, *Bubo sumatranus* StrigidaeN/A SS 1000fr Boreal Owl, *Aegolius funereus* StrigidaeMargin R: Long-eared Owl, *Asio otus* Strigidae

| | | | | |
|---|-----------|--|-------------------|------------|
| DJIBOUTI (continued) | | 2019 July 27 (Pigeons) (MS/4 & SS/1) | | A Z |
| a | 250fr | European Turtle-Dove, <i>Streptopelia turtur</i> | Columbidae | |
| b | 250fr | Eurasian Collared-Dove, <i>Streptopelia decaocto</i> | Columbidae | |
| c | 250fr | Crested Pigeon, <i>Ocyphaps lophotes</i> | Columbidae | |
| d | 250fr | Victoria Crowned-Pigeon, <i>Goura victoria</i> | Columbidae | |
| N/A | SS 1000fr | Rock Pigeon, <i>Columba livia</i> ssp. <i>dakhlae</i> | Columbidae | |
| | Margin | R: U/I Fancy Pigeons, <i>Columba livia</i> | Columbidae | |
| | | 2019 July 27 (Stamps-on-Stamps) (MS/4 & 4ea SS/1) | | A |
| a | 200fr | Plumbeous Warbler, <i>Setophaga plumbea</i> (Dominica Sc#827) | Parulidae | |
| N/A | SS 300fr | Blue-headed Hummingbird, <i>Cyanophaia bicolor</i> (Dominica Sc#829 s-o-s) | Trochilidae | |
| N/A | SS 300fr | Green-throated Carib, <i>Eulampis holosericeus</i> (Djibouti Sc#2527 s-o-s) | Trochilidae | |
| ESTONIA | | 2019 April 25 (Europa: National Birds) (Set/2) | | A |
| 893 | €1.40 | Barn Swallow, <i>Hirundo rustica</i> (head) | Hirundinidae | |
| 891 | €1.40 | Same species (in flight) | Hirundinidae | |
| FALKLAND ISLANDS | | 2019 March 4 (Shipwrecks Type of 2017) (Set/4) | | B |
| 1246 | £1.01 | Magellanic Cormorant, <i>Phalacrocorax magellanicus</i> | Phalacrocoracidae | |
| | | Imperial Cormorant, <i>Leucocarbo atriceps</i> | Phalacrocoracidae | |
| 1247 | £1.22 | Steamer Duck, <i>Tachyeres brachypterus</i> | Anatidae | |
| FAROE ISLANDS | | 2019 April 29 (Europa: National Birds) (Set/2 & Bklt/6) | | A |
| 733 | 19k | Black Guillemot, <i>Cephus grylle</i> (two on rock) (perf 13) | Alcidae | |
| 734 | 26k | Same species (one in water) (perf 13) | Alcidae | |
| 735a | | Bklt/6 (like Sc#733) (die cut 13×12¾) (s/a) | | |
| FR. SOUTH. & ANTARCTIC TERR. | | 2019 March 14 (Penguins Type of 2018) (Set/3 inscr. "2019") | | A |
| 594a | 10c | Southern Rockhopper Penguin, <i>Eudyptes chrysocome</i> | Spheniscidae | |
| 595a | 20c | King Penguin, <i>Aptenodytes patagonicus</i> | Spheniscidae | |
| 596a | 30c | Gentoo Penguin, <i>Pygoscelis papua</i> | Spheniscidae | |
| | | 2019 March 16 (Gentoo Penguins) (Single) | | A |
| 916 | €1 | Gentoo Penguins, <i>Pygoscelis papua</i> | Spheniscidae | |
| GERMANY | | 2019 May 2 (Europa: National Birds) (Single) | | A |
| 3098 | 70c | Yellowhammer, <i>Emberiza citronella</i> | Emberizidae | |
| HUNGARY | | 2019 May 9 (Europa: National Birds) (Pair & MS/4) | | A |
| 4515a | 400fo | Great Egret, <i>Ardea alba</i> | Ardeidae | |
| 4515b | 400fo | White Stork, <i>Ciconia ciconia</i> | Ciconiidae | |
| Note | | MS/4 (2ea Sc#4515a–b) | | |
| INDIA | | 2017 December 30 (Birds: Joint Papua New Guinea) (Set/2 & SS/2) | | A |
| 2984 | 5r | Raggiana Bird-of-Paradise, <i>Paradisaea raggiana</i> (pf 13½×13¾) | Paradisaeidae | |
| 2984a | 5r | Same species (perf 13¾) | | |
| 2985 | 25r | Indian Peafowl, <i>Pavo cristatus</i> (perf 13½×13¾) | Phasianidae | |
| 2985a | 25r | Same species (perf 13¾) | | |
| 2985b | | SS/2 (Sc#2984a & Sc#2985a) | | |
| JAPAN | | 2018 August 23 (Autumn Greetings) (MS/10) | | A |
| 4226e | 82¥ | Siberian Blue Robin, <i>Larvivora cyane</i> | Muscicapidae | Vol. 67(3) |
| LUXEMBOURG | | 2019 May 7 (Europa: National Birds) (Set/2) | | A |
| 1520 | 80c | Yellowhammer, <i>Emberiza citronella</i> | Emberizidae | |
| 1521 | €1.05 | Eurasian Linnet, <i>Linaria cannabina</i> | Fringillidae | |

| | | | | |
|--------------------------|---------|---|----------------|--------------|
| MALAWI | | 2018 December 3 (Vultures of Africa) (MS/6 & 5ea SS/1) | | A |
| 877a | 700k | Lappet-faced Vulture, <i>Torgos tracheliotos</i> | Accipitridae | |
| 877b | 700k | White-rumped Vulture, <i>Gyps bengalensis</i> | Accipitridae | |
| 877c | 700k | Cinereous Vulture, <i>Aegypius monachus</i> | Accipitridae | |
| 877d | 700k | White-backed Vulture, <i>Gyps africanus</i> | Accipitridae | |
| 877e | 700k | Rüppell's Vulture, <i>Gyps rueppelli</i> | Accipitridae | |
| 877f | 700k | Griffon Vulture, <i>Gyps fulvus</i> | Accipitridae | |
| 878 | SS 450k | Lappet-faced Vulture, <i>Torgos tracheliotos</i> | Accipitridae | |
| 879 | SS 450k | White-rumped Vulture, <i>Gyps bengalensis</i> | Accipitridae | |
| 882 | SS 450k | Cinereous Vulture, <i>Aegypius monachus</i> | Accipitridae | |
| 881 | SS 450k | White-backed Vulture, <i>Gyps africanus</i> | Accipitridae | |
| 882 | SS 450k | Hooded Vulture, <i>Necrosyrtes monachus</i> | Accipitridae | |
| MALDIVIVE ISLANDS | | 2019 June 15 (Bee-eaters) (MS/4 & SS/1) (circular) | | A Z |
| N/A | 20m | Blue-cheeked Bee-eater, <i>Merops persicus</i> | Meropidae | |
| N/A | 20m | Southern Carmine Bee-eater, <i>Merops nubicoides</i> | Meropidae | |
| N/A | 20m | Little Bee-eater, <i>Merops pusillus</i> | Meropidae | |
| N/A | 20m | Swallow-tailed Bee-eater, <i>Merops hirundineus</i> | Meropidae | |
| N/A | SS 60m | White-throated Bee-eater, <i>Merops albicollis</i> | Meropidae | |
| | Margin | R: European Bee-eater, <i>Merops apiaster</i> | Meropidae | |
| | | 2019 June 15 (Antarctica) (MS/4 & SS/1) (circular) | | A Z |
| a | 20m | Adelie Penguin, <i>Pygoscelis adeliae</i> | Spheniscidae | |
| c | 20m | South Polar Skua, <i>Stercorarius maccormicki</i> | Stercorariidae | |
| d | 20m | King Penguin, <i>Aptenodytes patagonicus</i> | Spheniscidae | |
| N/A | Margin | R: Emperor Penguin, <i>Aptenodytes forsteri</i> | Spheniscidae | |
| | | 2019 June 15 (Tropical Birds) (MS/4 & SS/1) (circular) | | A Z |
| N/A | 20m | Andean Cock-of-the-Rock, <i>Rupicola peruvianus</i> | Cotingidae | |
| N/A | 20m | Silver-breasted Broadbill, <i>Serilophus lunatus</i> | Eurylaimidae | |
| N/A | 20m | Bali Myna, <i>Leucopsar rothschildi</i> | Sturnidae | |
| N/A | 20m | Spangled Cotinga, <i>Cotinga cayana</i> | Cotingidae | |
| N/A | SS 70m | Curl-crested Aracari, <i>Pteroglossus beauharnaesii</i> | Ramphastidae | (new) |
| | Margin | R: Black-and-white Broadbill, <i>Eurylaimus ochromalus</i> | Eurylaimidae | |
| | | 2019 June 15 (Parrots) (MS/4 & SS/1) | | A Z |
| a | 20m | L: Dusky Lory, <i>Pseudeos fuscata</i> | Psittaculidae | |
| | | R: Jandaya Parakeet, <i>Aratinga jandaya</i> | Psittacidae | |
| b | 20m | Rainbow Lorikeet, <i>Trichoglossus haematodus</i> | Psittaculidae | |
| c | 20m | L: Rainbow Lorikeet, <i>Trichoglossus haematodus</i> | Psittaculidae | |
| | | R: Crimson Rosella, <i>Platycercus elegans</i> | Psittaculidae | |
| d | 20m | L: Blue-and-yellow-Macaw, <i>Ara ararauna</i> | Psittacidae | |
| | | R: Red-and-green-Macaw, <i>Ara chloropterus</i> (two) | Psittacidae | |
| N/A | SS 60m | Hyacinth Macaw, <i>Anodorhynchus hyacinthinus</i> | Psittacidae | |
| | Margin | UR: Chattering Lory, <i>Lorius garrulus</i> | Psittaculidae | |
| | | L: Nanday Parakeet, <i>Aratinga nenday</i> | Psittacidae | |
| | | 2019 June 15 (Sunbirds) (MS/4 & SS/1) | | A Z |
| a | 20m | Van Hasselt's Sunbird, <i>Leptocoma brasiliiana</i> | Nectariniidae | Vol. 68(3) |
| b | 20m | Olive-backed Sunbird, <i>Cinnyris jugularis</i> | Nectariniidae | |
| c | 20m | Greater Double-collared Sunbird, <i>Cinnyris afer</i> | Nectariniidae | |
| d | 20m | Palestine Sunbird, <i>Cinnyris osea</i> | Nectariniidae | |
| N/A | SS 70m | Ruby-cheeked Sunbird, <i>Chalcoparia singalensis</i> | Nectariniidae | |
| | Margin | UR: Crimson Sunbird, <i>Aethopyga siparaja</i> | Nectariniidae | |
| | | L: Purple-rumped Sunbird, <i>Leptocoma zeylonica</i> | Nectariniidae | |

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| MALDIVE ISLANDS (continued) | | | 2019 June 25 (Pelicans) (MS/4 & SS/1) | A Z |
| a | 22m | Brown Pelican, <i>Pelecanus occidentalis</i> | Pelecanidae | |
| b | 22m | Australian Pelican, <i>Pelecanus conspicillatus</i> | Pelecanidae | |
| c | 22m | Dalmatian Pelican, <i>Pelecanus crispus</i> | Pelecanidae | |
| d | 22m | Great White Pelican, <i>Pelecanus onocrotalus</i> | Pelecanidae | |
| N/A | SS 70m | American White Pelican, <i>Pelecanus erythrorhynchos</i> | Pelecanidae | |
| | Margin | L: Pink-backed Pelican, <i>Pelecanus rufescens</i> | Pelecanidae | |
| | | | 2019 June 25 (Owls) (MS/4 & SS/1) | A Z |
| a | 20m | Little Owl, <i>Athene noctua</i> | Strigidae | |
| b | 20m | Spotted Eagle-Owl, <i>Bubo Africanus</i> | Strigidae | |
| c | 20m | Great Horned Owl, <i>Bubo virginianus</i> | Strigidae | |
| d | 20m | Elf Owl, <i>Micrathene whitneyi</i> | Strigidae | |
| N/A | SS 60m | Southern White-faced Owl, <i>Ptilopsis granti</i> | Strigidae | |
| | Margin | L: Little Owl, <i>Athene noctua</i> | Strigidae | |
| | | | 2019 June 25 (Norwegian Fjords) (MS/4) | A |
| b | 20m | Atlantic Puffin, <i>Fratercula arctica</i> | Alcidae | |
| d | 20m | Black-backed Albatross, <i>Thalassarche melanophris</i> | Diomededidae | |
| MONACO | | | 2019 May 6 (Europa: National Birds) (Single) | A |
| 2971 | €1.30 | Peregrine Falcon, <i>Falco peregrinus</i> | Falconidae | |
| MOROCCO | | | 2012 October 9 (Joint Issue w/ Qatar) (Single) | B |
| 1155 | 8.40d | Peregrine Falcon, <i>Falco peregrinus</i> | Falconidae | |
| MOZAMBIQUE | | | 2019 June 10 (Birds of Prey) (MS/4 & SS/1) | A Z |
| a | 116m | Crested Caracara, <i>Caracara cheriway</i> | Falconidae | |
| b | 116m | Brown Falcon, <i>Falco berigora</i> | Falconidae | |
| c | 116m | Eurasian Kestrel, <i>Falco tinnunculus</i> | Falconidae | |
| d | 116m | White-backed Vulture, <i>Gyps africanus</i> | Accipitridae | |
| N/A | SS 300m | Brahminy Kite, <i>Haliastur Indus</i> | Accipitridae | |
| | Margin | Top: White-tailed Eagle, <i>Haliaeetus albicilla</i> | Accipitridae | |
| NIGER | | | 2019 June 26 (Sunbirds) (MS/4 & SS/1) | A Z |
| N/A | 800fr | Plain-throated Sunbird, <i>Anthreptes malacensis</i> | Nectariniidae | |
| N/A | 800fr | Streaked Spiderhunter, <i>Arachnothera magna</i> | Nectariniidae | Vol. 68(3) |
| N/A | 800fr | Collared Sunbird, <i>Hedydipna collaris</i> | Nectariniidae | |
| N/A | 800fr | Olive-backed Sunbird, <i>Cinnyris jugularis</i> | Nectariniidae | |
| N/A | SS 3300fr | Green-tailed Sunbird, <i>Aethopyga nipalensis</i> | Nectariniidae | |
| | Margin | L & Bot: Crimson Sunbird, <i>Aethopyga siparaja</i> | Nectariniidae | |
| | | | 2019 June 26 (Endangered Species) (MS/4 & SS/1) | A |
| b | 800fr | Swift Parrot, <i>Lathamus discolor</i> | Psittaculidae | |
| c | 800fr | Moseley's Rockhopper Penguin, <i>Eudyptes moseleyi</i> | Spheniscidae | |
| N/A | SS 3300fr | Siberian Crane, <i>Leucogeranus leucogeranus</i> | Gruidae | |
| NORTH MACEDONIA | | | 2019 May 2 (Europa: National Birds) (Set/2, MS/4, SS/1) | A |
| 813 | 72d | Montagu's Harrier, <i>Circus pygargus</i> | Accipitridae | |
| 814 | 72d | Eurasian March-Harrier, <i>Circus aeruginosus</i> | Accipitridae | |
| 815a | 50d | Lanner Falcon, <i>Falco biarmicus</i> | Falconidae | |
| 815b | 50d | Lesser Kestrel, <i>Falco naumanni</i> | Falconidae | |
| 815c | 50d | Red-footed Falcon, <i>Falco vespertinus</i> | Falconidae | |
| 815d | 50d | Peregrine Falcon, <i>Falco peregrinus</i> | Falconidae | |
| 815 | | MS/4 (Sc#815a–d) (sold with, but unattached to, a booklet cover) | | |
| 816 | SS 144d | Long-legged Buzzard, <i>Buteo rufinus</i> | Accipitridae | |

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| POLAND | | 2019 April 24 (Europa: National Birds) (Single) | A |
| 4411 | 5z | Common Chaffinch, <i>Fringilla coelebs</i> | Fringillidae |
| ST. THOMAS & PRINCE ISLANDS | | 2019 February 4 (Birds of Prey) (MS/4 & SS/1) | A Z |
| a | 31d | Spanish Eagle, <i>Aquila adalberti</i> | Accipitridae |
| b | 31d | Harris's Hawk, <i>Parabuteo unicinctus</i> | Accipitridae |
| c | 31d | Bateleur, <i>Terathopius ecaudatus</i> | Accipitridae |
| d | 31d | Golden Eagle, <i>Aquila chrysaetos</i> | Accipitridae |
| | Margin | Bkgrd: Ferruginous Hawk, <i>Buteo regalis</i> | Accipitridae |
| N/A | SS 124d | Ferruginous Hawk, <i>Buteo regalis</i> | Accipitridae |
| | Margin | Bkgrd & R: Bald Eagle, <i>Haliaeetus leucocephalus</i> | Accipitridae |
| | | 2019 February 4 (Hummingbirds) (MS/4 & SS/1) | A Z |
| a | 31d | Collared Inca, <i>Coeligena torquata</i> | Trochilidae |
| b | 31d | Allen's Hummingbird, <i>Selasphorus sasin</i> | Trochilidae |
| c | 31d | Copper-rumped Hummingbird, <i>Amazilia tobaci</i> | Trochilidae |
| d | 31d | Scintillant Hummingbird, <i>Selasphorus scintilla</i> | Trochilidae |
| N/A | SS 124d | Costa's Hummingbird, <i>Calypte costa</i> | Trochilidae |
| | Margin | R: White-bellied Hummingbird, <i>Amazilia chionogaster</i> | Trochilidae |
| | | 2019 March 13 (Hornbills) (MS/4 & SS/1) | A Z |
| a | 31d | Great Hornbill, <i>Buceros bicornis</i> | Bucerotidae |
| b | 31d | Indian Gray Hornbill, <i>Ocyrceros birostris</i> | Bucerotidae |
| c | 31d | Rufous Hornbill, <i>Buceros hydrocorax</i> | Bucerotidae |
| d | 31d | Wreathed Hornbill, <i>Rhyticeros undulatus</i> | Bucerotidae |
| N/A | SS 124d | Southern Yellow-billed Hornbill, <i>Tockus leucomelas</i> | Bucerotidae |
| | Margin | L: Southern Ground-Hornbill, <i>Bucorvus leadbeateri</i> | Bucorvidae |
| | | LR: Northern Red-billed Hornbill, <i>Tockus erythrorhynchus</i> | Bucerotidae |
| | | 2019 March 13 (Water Birds) (MS/4 & SS/1) | A Z |
| a | 31d | Purple Gallinule, <i>Porphyrio martinicus</i> | Rallidae |
| b | 31d | Roseate Spoonbill, <i>Platalea ajaja</i> | Threskiornithidae |
| c | 31d | White Ibis, <i>Eudocimus albus</i> | Threskiornithidae |
| d | 31d | Great Blue Heron, <i>Ardea herodias</i> | Ardeidae |
| N/A | SS 124d | African Jacana, <i>Actophilornis Africanus</i> | Jacanidae |
| | Margin | L: Scarlet Ibis, <i>Eudocimus ruber</i> | Threskiornithidae |
| | | LR: Lesser White-fronted Goose | Anatidae |
| | | 2019 March 13 (Owls) (MS/4 & SS/1) | A Z |
| a | 31d | Great Gray Owl, <i>Strix nebulosa</i> | Strigidae |
| b | 31d | Eastern Screech-Owl, <i>Megascops asio</i> | Strigidae |
| c | 31d | Northern White-faced Owl, <i>Ptilopsis leucotis</i> | Strigidae |
| d | 31d | Eurasian Eagle-Owl, <i>Bubo bubo</i> | Strigidae |
| N/A | SS 124d | Barn Owl, <i>Tyto alba</i> | Tytonidae |
| | Margin | L: Eastern Screech-Owl, <i>Megascops asio</i> | Strigidae |
| | | 2019 August 14 (Birds of Prey) (MS/4 & SS/1) | A Z |
| N/A | 31d | Crowned Hawk-Eagle, <i>Stephanoaetus coronatus</i> | Accipitridae |
| N/A | 31d | Red Kite, <i>Milvus milvus</i> | Accipitridae |
| N/A | 31d | Steppe Eagle, <i>Aquila nipalensis</i> | Accipitridae |
| N/A | 31d | Secretary-bird, <i>Sagittarius serpentarius</i> | Sagittariidae |
| | Margin | Top: Harris's Hawk, <i>Parabuteo unicinctus</i> | Accipitridae |
| N/A | SS 124d | Northern Goshawk, <i>Accipiter gentilis</i> | Accipitridae |
| | Margin | R: Golden Eagle, <i>Aquila chrysaetos</i> | Accipitridae |

Vol. 68(2)

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| ST. THOMAS & PRINCE (cont) | | | 2019 Aug. 14 (Owls) (MS/4 & SS/1) | A Z |
| N/A | 31d | Burrowing Owl, <i>Athene cunicularia</i> | Strigidae | |
| N/A | 31d | Great Gray Owl, <i>Bubo virginianus</i> | Strigidae | |
| N/A | 31d | Snowy Owl, <i>Bubo scandiacus</i> | Strigidae | |
| N/A | 31d | Long-eared Owl, <i>Asio otus</i> | Strigidae | |
| N/A | SS 124d | Eurasian Eagle-Owl, <i>Bubo bubo</i> | Strigidae | |
| | Margin | R: Barn Owl, <i>Tyto alba</i> | Tytonidae | |
| SIERRA LEONE | | | 2016 December 29 (Hornbills) (MS/4 & SS/1) | A Z |
| 4055a | 6000le | L: Rhinoceros Hornbill, <i>Buceros rhinoceros</i> | Bucerotidae | |
| | | R: Rufous Hornbill, <i>Buceros hydrocorax</i> | Bucerotidae | |
| 4055b | 6000le | Knobbed Hornbill, <i>Rhyticeros cassidix</i> | Bucerotidae | |
| 4055c | 6000le | Great Hornbill, <i>Buceros bicornis</i> | Bucerotidae | |
| 4055d | 6000le | R: Great Hornbill, <i>Buceros bicornis</i> | Bucerotidae | |
| | | L: Narcondam Hornbill, <i>Rhyticeros narcondami</i> | Bucerotidae | (new) |
| 4074 | SS 24000le | Rufous-necked Hornbill, <i>Aceros nipalensis</i> | Bucerotidae | |
| | Margin | UR: Great Hornbill, <i>Buceros bicornis</i> | Bucerotidae | |
| | | Bot: Knobbed Hornbill, <i>Rhyticeros cassidix</i> | Bucerotidae | |
| | | | 2016 December 29 (Water Birds) (MS/4 & SS/1) | A |
| 4056a | 6000le | Wandering Albatross, <i>Diomedea exulans</i> ssp. <i>amsterdamensis</i> | Diomedidae | |
| 4056b | 6000le | Black-fronted Tern, <i>Chlidonias albostrigatus</i> (Cap: <i>Sterna a.</i>) | Laridae | |
| 4056c | 6000le | New Zealand Storm-Petrel, <i>Fregata maorianus</i> | Oceanitidae | Vol. 67(1) |
| 4056d | 6000le | Abbott's Booby, <i>Papasula abbotti</i> | Sulidae | |
| 4075 | SS 24000le | Galapagos Penguin, <i>Spheniscus mendiculus</i> | Spheniscidae | |
| | | | 2016 December 29 (Indigo Birds) (MS/4 & SS/1) | A Z |
| 4057a | 6000le | Indigo Bunting, <i>Passerina cyanea</i> ♀ (w/ eggs in nest) | Cardinalidae | |
| 4057b | 6000le | Same species ♂ | Cardinalidae | |
| 4057c | 6000le | Same species ♀ | Cardinalidae | |
| 4057d | 6000le | Same species ♂ & ♀ | Cardinalidae | |
| 4076 | SS 24000le | Indigo Bunting, <i>Passerina cyanea</i> ♂ | Cardinalidae | |
| | Margin | UR: Same species ♂ | Cardinalidae | |
| | | Bot: Same species ♀ (w/ eggs & nest) | Cardinalidae | |
| | | | 2016 December 29 (Bee-eaters) (MS/4 & SS/1) | A Z |
| 4058a | 6000le | Little Bee-eater, <i>Merops pusillus</i> ssp. <i>cyanostictus</i> | Meropidae | |
| 4058b | 6000le | Red-bearded Bee-eater, <i>Nyctyornis amictus</i> | Meropidae | |
| 4058c | 6000le | European Bee-eater, <i>Merops apiaster</i> | Meropidae | |
| 4058d | 6000le | Cinnamon-chested Bee-eater, <i>Merops oreobates</i> | Meropidae | |
| 4077 | SS 24000le | Rainbow Bee-eater, <i>Merops ornatus</i> | Meropidae | |
| | Margin | UR: Red-bearded Bee-eater, <i>Nyctyornis amictus</i> | Meropidae | |
| | | Bot: Southern Carmine Bee-eater, <i>Merops nubicoides</i> | Meropidae | |
| | | | 2016 December 29 (Endangered Species) (MS/4) | A |
| 4064b | 6000le | Blue-throated Macaw, <i>Ara glaucogularis</i> | Psittacidae | |
| | | | 2018 January 30 (Lighthouses) (MS/4 & SS/1) | B Z |
| 4627a | 9800le | Pacific Gull, <i>Larus pacificus</i> | Laridae | |
| 4627b | 9800le | Lesser Black-backed Gull, <i>Larus fuscus</i> | Laridae | |
| 4627c | 9800le | Bonaparte's Gull, <i>Chroicocephalus philadelphia</i> | Laridae | |
| 4627d | 9800le | Mediterranean Gull, <i>Ichthyophaga melanocephalus</i> | Laridae | |
| 4647 | Margin | LR: Lesser Black-backed Gull, <i>Larus fuscus</i> | Laridae | |

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| SIERRA LEONE (continued) | | 2018 February 27 (Bee-eaters) (MS/4 & SS/1) | A Z |
| 4668a | 9800le | Cinnamon-chested Bee-eater, <i>Merops oreobates</i> | Meropidae |
| 4668b | 9800le | European Bee-eater, <i>Merops apiaster</i> | Meropidae |
| 4668c | 9800le | Southern Carmine Bee-eater, <i>Merops nubicoides</i> | Meropidae |
| 4668d | 9800le | Blue-cheeked Bee-eater, <i>Merops persicus</i> ssp. <i>chrysocercus</i> | Meropidae |
| 4687 | SS 40000le | Blue-tailed Bee-eater, <i>Merops philippinus</i> | Meropidae |
| | Margin | LL & Bot: European Bee-eater, <i>Merops apiaster</i> | Meropidae |
| | | LR: Southern Carmine Bee-eater, <i>Merops nubicoides</i> | Meropidae |
| | | 2018 February 27 (Parrots) (MS/4 & SS/1) | A Z |
| 4669a | 9800le | Scarlet Macaw, <i>Ara macao</i> | Psittacidae |
| 4669b | 9800le | Golden Parakeet, <i>Guarouba guarouba</i> | Psittacidae |
| 4669c | 9800le | Turquoise-fronted Parrot, <i>Amazona aestiva</i> | Psittacidae |
| 4669d | 9800le | Sun Parakeet, <i>Aratinga solstitialis</i> | Psittacidae |
| 4688 | SS 40000le | L: Scarlet Macaw, <i>Ara macao</i> | Psittacidae |
| | | R: Blue-and-yellow Macaw, <i>Ara ararauna</i> | Psittacidae |
| | Margin | ML: Hyacinth Macaw, <i>Anodorhynchus hyacinthinus</i> | Psittacidae |
| | | Bot: Blue-and-yellow Macaw, <i>Ara ararauna</i> | Psittacidae |
| | | MR: Bronze-winged Parrot, <i>Pionus chalcopterus</i> | Psittacidae |
| | | 2018 February 27 (Extinct Species) (MS/4) | A |
| 4670b | 9800le | †Red Rail, <i>Aphanapteryx bonasais</i> | Rallidae |
| | | 2018 February 27 (Stamps-on-Stamps) (MS/4) | B |
| 4671b | 9800le | Red-footed Booby, <i>Sula sula</i> (Cayman Islands Sc#87 s-o-s) | Sulidae |
| | | 2018 March 30 (Water Birds) (MS/4 & SS/1) | A Z |
| 4717a | 9800le | Hooded Merganser, <i>Lophodytes cucullatus</i> | Anatidae |
| 4717b | 9800le | Common Merganser, <i>Mergus merganser</i> | Anatidae |
| 4717c | 9800le | Barrow's Goldeneye, <i>Bucephala islandica</i> | Anatidae |
| 4717d | 9800le | Northern Fulmar, <i>Fulmarus glacialis</i> | Procellariidae |
| 4736 | SS 40000le | Atlantic Puffin, <i>Fratercula arctica</i> | Alcidae |
| | Margin | Ctr: Same species | Alcidae |
| | | R: Snowy Owl, <i>Bubo scandiacus</i> | Strigidae |
| SLOVENIA | | 2019 May 31 (Europa: National Birds) (Set/2) | A |
| 1336 | €1.31 | Bearded Reedling, <i>Panurus biarmicus</i> | Panuridae |
| 1337 | €1.45 | Purple Heron, <i>Ardea purpurea</i> | Ardeidae |
| SPAIN | | 2018 September 3 (Provinces Abbreviations Type of 2017) | B |
| 4248 | (55c) | Bearded Vulture, <i>Gypaetus barbatus</i> (NA: Navarra) | Accipitridae |
| | | 2018 November 5 (UNESCO World Heritage Site) (Single) | C |
| For the 20th Anniversary of the University and Historic District of Alcalá de Henares UNESCO World Heritage Site, featuring a small image of a bird in flight. | | | |
| 4314 | 65c | White Stork, <i>Ciconia ciconia</i> | Ciconiidae |
| | | 2019 February 1 (Provinces Abbreviations Type of 2017) | C |
| 4321 | (60c) | White Stork, <i>Ciconia ciconia</i> (BA: Badajoz) | Ciconiidae |
| | | 2019 March 1 (Provinces Abbreviations Type of 2017) | C |
| 4322 | (60c) | Bearded Vulture, <i>Gypaetus barbatus</i> (BU: Burgos) | Accipitridae |
| SRI LANKA | | 2018 May 24 (Fauna) (Set/3 & SS/3) | A |
| 2143 | 100r | Sri Lanka Junglefowl, <i>Gallus lafayetii</i> | Phasianidae |
| 2143a | | SS/3 (Sc#2141–43) | |

Vol. 67(2&3)

Vol. 67(2)

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| SUDAN | | 2019 (Surcharges) | | A |
| 673 | £200 | Black-crowned Crane, <i>Balearica pavonina</i> (Sc#408 surch) | Gruidae | |
| 674 | £250 | Secretary-bird, <i>Sagittarius serpentarius</i> (Sc#410 surch) | Sagittariidae | |
| SURINAM | | 2018 June 20 (Cockatoos) (Block/12) | | A |
| 1540a | \$1 | White Cockatoo, <i>Cacatua alba</i> | Cacatuidae | |
| 1540b | \$5 | Ducorp's Cockatoo, <i>Cacatua ducorpsii</i> | Cacatuidae | |
| 1540c | \$6 | Sulphur-crested Cockatoo, <i>Cacatua galerita</i> ssp. <i>eleonora</i> | Cacatuidae | |
| 1540d | \$7 | Sulphur-crested Cockatoo, <i>Cacatua galerita</i> ssp. <i>fitzroyi</i> | Cacatuidae | |
| 1540e | \$9 | Sulphur-crested Cockatoo, <i>Cacatua galerita</i> ssp. <i>triton</i> | Cacatuidae | |
| 1540f | \$10 | Sulphur-crested Cockatoo, <i>Cacatua galerita</i> | Cacatuidae | |
| 1540g | \$11 | Tanimbar Corella, <i>Cacatua goffiniana</i> | Cacatuidae | |
| 1540h | \$12 | Philippine Cockatoo, <i>Cacatua haematuropygia</i> | Cacatuidae | |
| 1540i | \$14 | Pink Cockatoo, <i>Lophochroa leadbeateri</i> | Cacatuidae | |
| 1540j | \$18 | Salmon-crested Cockatoo, <i>Cacatua moluccensis</i> | Cacatuidae | |
| 1540k | \$20 | Blue-eyed Cockatoo, <i>Cacatua ophthalmica</i> | Cacatuidae | Vol. 67(3) |
| 1540l | \$22 | Little Corella, <i>Cacatua sanguinea</i> | Cacatuidae | |
| | | 2018 September 12 (Birds) (Horiz Pair & SS/2) | | A |
| 1541a | \$25 | Blue-gray-Tanager, <i>Thraupis episcopus</i> (Cap: <i>Sialia sialis</i>) | Thraupidae | |
| 1541b | \$70 | Zebra Finch, <i>Taeniopygia guttata</i> | Estrildidae | |
| 1541 | | Horiz Pair (Sc#1541a–b) | | |
| 1542a | SS \$35 | Rosy-faced Lovebird, <i>Agapornis roseicollis</i> | Psittaculidae | |
| 1542b | SS \$60 | Gouldian Finch, <i>Erythrura gouldiae</i> | Estrildidae | |
| 1542 | | SS/2 (Sc#1542a–b) | | |
| | | 2018 October 10 (Birds of Prey) (Block/12) | | A |
| 1543a | \$1 | Cassin's Hawk-Eagle, <i>Aquila africana</i> (Cap: <i>A. africanus</i>) | Accipitridae | |
| 1543b | \$5 | Bonelli's Eagle, <i>Aquila fasciata</i> (Cap: <i>A. fasciatus</i>) | Accipitridae | |
| 1543c | \$6 | Imperial Eagle, <i>Aquila heliaca</i> | Accipitridae | |
| 1543d | \$7 | Beaudouin's Snake-Eagle, <i>Circaetus beaudouini</i> | Accipitridae | |
| 1543e | \$9 | Banded Snake-Eagle, <i>Circaetus cinerascens</i> | Accipitridae | |
| 1543f | \$10 | Brown Snake-Eagle, <i>Circaetus cinereus</i> | Accipitridae | |
| 1543g | \$11 | Black-breasted Snake-Eagle, <i>Circaetus pectoralis</i> | Accipitridae | |
| 1543h | \$12 | Congo Serpent-Eagle, <i>Dryotriorchis spectabilis</i> | Accipitridae | |
| 1543i | \$14 | Bald Eagle, <i>Haliaeetus leucocephalus</i> | Accipitridae | |
| 1543j | \$18 | African Fish-Eagle, <i>Haliaeetus vocifer</i> | Accipitridae | |
| 1543k | \$20 | Chaco Eagle, <i>Buteogallus coronatus</i> (Cap: <i>Harpyhaliaetus c.</i>) | Accipitridae | |
| 1543l | \$22 | Ayres's Hawk-Eagle, <i>Hieraetus ayresii</i> | Accipitridae | |
| | | 2018 December 29 (Flora & Fauna) (12ea SS/1) | | A |
| 1546 | SS (\$5) | White-throated Toucan, <i>Ramphastos tucanus</i> | Ramphastidae | |
| 1548 | SS \$5 | Green-tailed Jacamar, <i>Galbula galbula</i> | Galbulidae | |
| 1551 | SS \$5 | Black Nunbird, <i>Monasa atra</i> | Bucconidae | |
| 1552 | SS \$5 | Black-tailed Trogon, <i>Trogon melanurus</i> | Trogonidae | |
| 1553 | SS \$5 | Fork-tailed Woodnymph, <i>Thalurania furcata</i> | Trochilidae | |
| 1554 | SS \$5 | Black-banded Owl, <i>Ciccaba huhula</i> | Strigidae | |
| 1557 | SS \$5 | Black-faced Dacnis, <i>Dacnis lineate</i> | Thraupidae | |
| | | 2019 February 13 (Eagles) (Block/12) | | A |
| 1559a | (\$1.50) | Booted Eagle, <i>Hieraetus pennatus</i> ("C" rate) | Accipitridae | |
| 1559b | \$4.50 | African Hawk-Eagle, <i>Aquila spilogaster</i> | Accipitridae | |
| 1559c | \$6 | Black Eagle, <i>Ictinaetus malaiensis</i> | Accipitridae | |
| 1559d | \$7 | Crested Eagle, <i>Morphnus guianensis</i> | Accipitridae | |
| 1559e | \$9 | Blyth's Eagle, <i>Nisaetus alboniger</i> | Accipitridae | |

SURINAM (continued)

| | | | | |
|-------|------|--|--------------|------------|
| 1559f | \$10 | Changeable Hawk-Eagle, <i>Nisaetus limnaeetus</i> (Cap: <i>N. cirrhatus</i> , assigned to a ssp. elevated to a full species status, Crested Hawk-Eagle) | Accipitridae | |
| 1559g | \$11 | Flores Hawk-Eagle, <i>Nisaetus floris</i> | Accipitridae | |
| 1559h | \$12 | Crested Serpent-Eagle, <i>Spilornis cheela</i> | Accipitridae | |
| 1559i | \$14 | Andaman Serpent-Eagle, <i>Spilornis elgini</i> | Accipitridae | Vol. 68(2) |
| 1559j | \$18 | Black-and-Chestnut Eagle, <i>Spizaetus isidori</i> | Accipitridae | |
| 1559k | \$20 | Chaco Eagle, <i>Buteogallus coronatus</i> (Cap: <i>Stephanoaetus c.</i>) | Accipitridae | |
| 1559l | \$22 | Bateleur, <i>Terathopius ecaudatus</i> | Accipitridae | |

SWEDEN**2018 November 1** (Birds in Winter) (Bklt/10) (s/a)**A**

| | | | | |
|-------|------|--|---------------|--|
| 2829a | (9k) | Great Tit, <i>Parus major</i> | Paridae | |
| 2829b | (9k) | Bohemian Waxwing, <i>Bombycilla garrulus</i> | Bombycillidae | |
| 2829c | (9k) | Eurasian Bullfinch, <i>Pyrrhula</i> (facing R) | Fringillidae | |
| 2829d | (9k) | Eurasian Bullfinch, <i>Pyrrhula pyrrhula</i> (facing L) | Fringillidae | |
| 2829e | (9k) | European Goldfinch, <i>Carduelis carduelis</i> | Fringillidae | |
| 2829f | (9k) | European Greenfinch, <i>Carduelis chloris</i> | Fringillidae | |
| 2829g | (9k) | European Robin, <i>Erithacus rubecula</i> | Muscicapidae | |
| 2829h | (9k) | Eurasian Blue Tit, <i>Cyanistes caeruleus</i> | Paridae | |
| 2829i | (9k) | Eurasian Tree Sparrow, <i>Passer montanus</i> (facing R) | Passeridae | |
| 2829j | (9k) | Eurasian Tree Sparrow, <i>Passer montanus</i> (facing L) | Passeridae | |

2019 May 9 (Europa: National Birds) (SS/2)**A**

| | | | | |
|-------|-----|---|----------|--|
| 2843a | 21k | Eurasian Blackbird, <i>Turdus merula</i> ♂ (facing R) | Turdidae | |
| 2843b | 21k | Same species ♀ (facing L) | Turdidae | |

SWITZERLAND**2019 May 2** (Europa: National Birds) (Horiz Pair)**A**

| | | | | |
|-------|------|--|--------------|--|
| 1725 | 100c | Golden Eagle, <i>Aquila chrysaetos</i> | Accipitridae | |
| 1726 | 100c | Sanderling, <i>Calidris alba</i> | Scolopacidae | |
| 1726a | | Horiz Pair (Sc#1725–26) | | |

2019 May 2 (Vintner's Festival) (Horiz Strip/3)**A**

| | | | | |
|-------|------|--|-----------|--|
| 1727c | 100c | Common Starling, <i>Sturnus vulgaris</i> | Sturnidae | |
|-------|------|--|-----------|--|

SYRIA**2018 December 18** (Birds) (Vert Strip/5)**A**

| | | | | |
|-------|------|--|--------------|--|
| 1774a | £400 | European Bee-eater, <i>Merops apiaster</i> (Cap: <i>M. oreobates</i>) | Meropidae | |
| 1774b | £400 | Northern Lapwing, <i>Vanellus vanellus</i> | Charadriidae | |
| 1774c | £400 | Eurasian Golden Oriole, <i>Oriolus oriolus</i> | Oriolidae | |
| 1744d | £400 | Eurasian Blackcap, <i>Sylvia atricapilla</i> | Sylviidae | |
| 1744e | £400 | Spur-winged Lapwing, <i>Vanellus spinosus</i> | Charadriidae | |

TONGA**2018 March 15** (Birdpex 2018) (Horiz Pair)**A**

| | | | | |
|-------|-----|---|--------------|------------|
| 1335s | 5pa | Orange-footed Scrubfowl, <i>Megapodius reinwardt</i> (facing L) | Megapodiidae | Vol. 67(2) |
| 1335b | 5pa | Same species (facing right) | Megapodiidae | |

2018 December 18 (Birds of Prey) (Set/12, MS/12, 2ea SS/6)**A**

The stamps in the set have white frames on each side. The stamps in the two souvenir sheets have white sides on one or two sides. The stamps in MS/12 contain the same designs as the ones in the set, but without white frames.

| | | | | |
|-------|--------|---|--------------|--|
| 1346 | 5s | Bat Hawk, <i>Macheiramphus alcinus</i> | Accipitridae | |
| 1347 | 10s | White-tailed Hawk, <i>Elanus leucurus</i> | Accipitridae | |
| 1348 | 1.40pa | Black-winged Kite, <i>Elanus caeruleus</i> | Accipitridae | |
| 1349 | 2.30pa | Madagascar Fish-Eagle, <i>Haliaeetus vociferoides</i> | Accipitridae | |
| 1350 | 2.50pa | Gray-headed Kite, <i>Leptodon cayanensis</i> ssp. <i>cayanensis</i> | Accipitridae | |
| 1351 | 2.80pa | Lesser Fish-Eagle, <i>Haliaeetus humilis</i> ssp. <i>humilis</i> | Accipitridae | |
| 1351a | | SS/6 (Sc#1346–51) (w/ white frames on one or two sides) | | |

TONGA (continued)

| | | | | |
|-------|---------|---|--------------|------------|
| 1352 | 4.30pa | Besra, <i>Accipiter virgatus</i> ssp. <i>nisoides</i> *** | Accipitridae | Vol. 68(2) |
| 1353 | 5.20pa | Herdib's Baza, <i>Aviceda jerdoni</i> | Accipitridae | |
| 1354 | 6.90pa | Black Gaza, <i>Aviceda leuphotes</i> | Accipitridae | |
| 1355 | 9.30pa | African Cuckoo-Hawk, <i>Aviceda cuculoides</i> ssp. <i>verreauxii</i> | Accipitridae | |
| 1356 | 9.50pa | Dark Chanting-Goshawk, <i>Melierax metabates</i> | Accipitridae | |
| 1357 | 11.50pa | Scissor-tailed Kite, <i>Chelictinia riocourii</i> | Accipitridae | |
| 1357a | | SS/6 (Sc#1352–57) (w/ white frames on one or two sides) | | |
| 1358 | | MS/12 (Sc#1358a–l) (w/o white frames) | | |

***This species appeared on a Guinea-Bissau sheet issued 25 October 2005, but Scott Publishing has not assigned numbers for issues of that country since 2004.

TONGA (Niufo'ou)**2018 May 3** (Birdpex 2018) (Block/4)**A**

| | | | | |
|------|--------|--|---------------|------------|
| 371a | 2.25pa | Red-breasted Dotterel, <i>Charadrius obscurus</i> (Cap: New Zealand Dotterel) | Charadriidae | |
| 371b | 2.25pa | Red-capped Plover, <i>Charadrius ruficapillus</i> | Charadriidae | Vol. 67(2) |
| 371c | 2.25pa | Antipodes Parakeet, <i>Cyanoramphus unicolor</i> | Psittaculidae | Vol. 67(2) |
| 371d | 2.25pa | Shore Plover, <i>Thinornis novaeseelandiae</i> | Charadriidae | |

2018 September 10 (Animals of the World Type) (SS/1)**A**

| | | | | |
|-----|------|---|-------------|--|
| 378 | 10pa | Jandaya Parakeet, <i>Aratinga jandaya</i> | Psittacidae | |
|-----|------|---|-------------|--|

TOGO**2018 November 30** (Owls) (2ea MS/4 & 4ea SS/2)**A Z**

Each MS and SS has images of other U/I owls in the top margin.

| | | | | |
|-----|----------|--|-----------|--|
| a | 800fr | Snowy Owl, <i>Bubo scandiacus</i> | Strigidae | |
| b | 800fr | Barn Owl, <i>Tyto alba</i> | Tytonidae | |
| c | 800fr | Eurasian Eagle-Owl, <i>Bubo bubo</i> | Strigidae | |
| d | 800fr | Rock Eagle-Owl, <i>Bubo bengalensis</i> | Strigidae | |
| N/A | | MS/4 (a–d) (Sheet I) | | |
| a | 800fr | Great Gray Owl, <i>Strix nebulosa</i> | Strigidae | |
| b | 800fr | Eurasian Eagle-Owl, <i>Bubo bubo</i> | Strigidae | |
| c | 800fr | Eastern Screech-Owl, <i>Megascops asio</i> | Strigidae | |
| d | 800fr | Boreal Owl, <i>Aegolius funereus</i> | Strigidae | |
| N/A | | MS/4 (a–d) (Sheet II) | | |
| a | SS 800fr | Snowy Owl, <i>Bubo scandiacus</i> | Strigidae | |
| b | SS 800fr | Barn Owl, <i>Tyto alba</i> | Tytonidae | |
| a | SS 800fr | Eurasian Eagle-Owl, <i>Bubo bubo</i> | Strigidae | |
| b | SS 800fr | Rock Eagle-Owl, <i>Bubo bengalensis</i> | Strigidae | |
| a | SS 800fr | Great Gray Owl, <i>Strix nebulosa</i> | Strigidae | |
| b | SS 800fr | Eurasian Eagle-Owl, <i>Bubo bubo</i> | Strigidae | |
| a | SS 800fr | Eastern Screech-Owl, <i>Megascops asio</i> | Strigidae | |
| b | SS 800fr | Boreal Owl, <i>Aegolius funereus</i> | Strigidae | |

2019 February 25 (Hummingbirds) (MS/4 & SS/1)**A Z**

| | | | | |
|-----|-----------|--|-------------|--|
| a | 800fr | Ruby-throated Hummingbird, <i>Archilochus colubris</i> | Trochilidae | |
| b | 800fr | White-necked Jacobin, <i>Florisuga mellivora</i> | Trochilidae | |
| c | 800fr | Brazilian Ruby, <i>Clytolaema rubricauda</i> | Trochilidae | |
| d | 800fr | Mexican Violetear, <i>Colibri thalassinus</i> | Trochilidae | |
| | Margin | UL: Mexican Violetear, <i>Colibri thalassinus</i> | Trochilidae | |
| | | UR: Rufous-breasted Hermit, <i>Glaucis hirsutus</i> ssp. <i>insularium</i> | Trochilidae | |
| N/A | SS 3300fr | Mexican Violetear, <i>Colibri thalassinus</i> | Trochilidae | |
| | Margin | R: Mexican Violetear, <i>Colibri thalassinus</i> | Trochilidae | |
| | | UL: White-necked Jacobin, <i>Florisuga mellivora</i> | Trochilidae | |

| | | | |
|-------------------------|-----------|--|---------------|
| TOGO (continued) | | 2019 February 25 (Ducks) (MS/4 & SS/1) | A Z |
| a | 800fr | Harlequin Duck, <i>Histrionicus histrionicus</i> | Anatidae |
| b | 800fr | Mandarin Duck, <i>Aix galericulata</i> | Anatidae |
| c | 800fr | Common Shelduck, <i>Tadorna tadorna</i> | Anatidae |
| d | 800fr | Northern Pintail, <i>Anas acuta</i> | Anatidae |
| | Margin | UL: Bufflehead, <i>Bucephala albeola</i> | Anatidae |
| | | UR: Spectacled Eider, <i>Somateria fischeri</i> | Anatidae |
| N/A | SS 3300fr | Wood Duck, <i>Aix sponsa</i> | Anatidae |
| | Margin | UL: Muscovy Duck, <i>Cairina moschata</i> | Anatidae |
| | | R: Mallard, <i>Anas platyrhynchos</i> | Anatidae |
| | | 2019 February 25 (Parrots) (MS/4 & SS/1) | A Z |
| a | 800fr | Budgerigar, <i>Melopsittacus undulates</i> | Psittaculidae |
| b | 800fr | Black-capped Lory, <i>Lorius lory</i> | Psittaculidae |
| c | 800fr | Sulphur-crested Cockatoo, <i>Cacatua galerita</i> | Cacatuidae |
| d | 800fr | Sun Parakeet, <i>Aratinga solstitialis</i> | Psittacidae |
| | Margin | UL: Hyacinth Macaw, <i>Anodorhynchus hyacinthinus</i> | Psittacidae |
| | | UR: Gray Parrot, <i>Psittacus erithacus</i> | Psittacidae |
| N/A | SS 3300fr | Scarlet Macaw, <i>Ara macao</i> | Psittacidae |
| | Margin | UL: Galah, <i>Eolophus roseicapilla</i> | Cacatuidae |
| | | R: Blue-and-yellow Macaw, <i>Ara ararauna</i> | Psittacidae |
| | | 2019 February 25 (Pigeons) (2ea MS/4) | A Z |
| a | 800fr | Rock Pigeon, <i>Columba livia</i> | Columbidae |
| b | 800fr | Speckled Pigeon, <i>Columba guinea</i> | Columbidae |
| c | 800fr | Eared Dove, <i>Zenaidura macroura</i> | Columbidae |
| d | 800fr | Red-eyed Dove, <i>Streptopelia semitorquata</i> | Columbidae |
| | Margin | Top: Rock Pigeon, <i>Columba livia</i> | Columbidae |
| a | 800fr | Common Bronzewing, <i>Phaps chalcoptera</i> | Columbidae |
| b | 800fr | Asian Emerald Dove, <i>Chalcophaps indica</i> | Columbidae |
| c | 800fr | Eurasian Collared-Dove, <i>Streptopelia decaocto</i> | Columbidae |
| d | 800fr | L: Bar-shouldered Dove, <i>Geopelia humeralis</i> | Columbidae |
| | | R: Ring-necked Dove, <i>Streptopelia capicola</i> | Columbidae |
| | Margin | Top: Rock Pigeon, <i>Columba livia</i> | Columbidae |
| | | 2019 June 25 (Rails) (MS/4 & SS/1) | A Z |
| a | 800fr | South Island Takahē, <i>Porphyrio hochstetteri</i> | Rallidae |
| b | 800fr | Red-legged Crake, <i>Rallina fasciata</i> | Rallidae |
| | | (This is new , but issued by Palau on 19 December 2018, prior to Togo. See Vol. 68(2) for Chuck's listing of the Palau issue.) | |
| c | 800fr | Water Rail, <i>Rallus aquaticus</i> | Rallidae |
| d | 800fr | Ruddy-breasted Crake, <i>Porzana fusca</i> | Rallidae |
| | Margin | R: Spotted Crake, <i>Porzana porzana</i> | Rallidae |
| N/A | SS 3300fr | Virginia Rail, <i>Rallus limicola</i> | Rallidae |
| | | (Previously shown on a 1982 Grunay local issue) | |
| | Margin | R: Dusky Moorhen, <i>Gallinula tenebrosa</i> | Rallidae |
| | | 2019 June 25 (Endangered Species) (MS/4) | A |
| b | 800fr | Whooping Crane, <i>Grus americana</i> | Gruidae |
| | | 2019 June 25 (Owls) (MS/4 & SS/1) | A Z |
| a | 800fr | Snowy Owl, <i>Bubo scandiacus</i> | Strigidae |
| b | 800fr | Great Horned Owl, <i>Bubo virginianus</i> | Strigidae |
| c | 800fr | Great Gray Owl, <i>Strix nebulosa</i> | Strigidae |
| d | 800fr | Barn Owl, <i>Tyto alba</i> | Tytonidae |

TOGO (continued)

| | | | | |
|--|-----------|---|-------------------|------------|
| | Margin | R: Eurasian Eagle-Owl, <i>Bubo bubo</i> | Strigidae | |
| N/A | SS 3300fr | Verreaux's Eagle-Owl, <i>Bubo lacteus</i> | Strigidae | |
| | Margin | R: Striped Owl, <i>Pseudoscops clamator</i> | Strigidae | |
| 2019 June 25 (Birds of Prey) (MS/4 & SS/1) | | | | A Z |
| a | 800fr | Bateleur, <i>Terathopius ecaudatus</i> | Accipitridae | |
| b | 800fr | Eurasian Griffon, <i>Gyps fulvus</i> | Accipitridae | |
| c | 800fr | Black Kite, <i>Milvus migrans</i> | Accipitridae | |
| d | 800fr | Eurasian Hobby, <i>Falco subbuteo</i> | Falconidae | |
| | Margin | R: Lammergeier, <i>Gypaetus barbatus</i> | Accipitridae | |
| N/A | SS 3300fr | Golden Eagle, <i>Aquila chrysaetos</i> | Accipitridae | |
| | Margin | R: Bald Eagle, <i>Haliaeetus leucocephalus</i> | Accipitridae | |
| 2019 June 25 (Rare Birds) (MS/4 & SS/1) | | | | A Z |
| a | 800fr | Orange-bellied Parrot, <i>Neophema chrysogaster</i> | Psittaculidae | |
| b | 800fr | Atlantic Puffin, <i>Fratercula arctica</i> | Alcidae | |
| c | 800fr | Scaly-sided Merganser, <i>Mergus squamatus</i> | Anatidae | |
| d | 800fr | Kagu, <i>Rhynochetos jubatus</i> | Rhynochetidae | |
| | Margin | R: Red-crowned Crane, <i>Grus japonensis</i> | Gruidae | |
| N/A | SS 3300fr | Satyr Tragopan, <i>Tragopan satyra</i> | Phasianidae | |
| | Margin | R: Kakapo, <i>Strigops habroptila</i> | Strigopidae | |
| 2019 June 25 (Pelicans) (MS/4 & SS/1) | | | | A Z |
| a | 800fr | Brown Pelican, <i>Pelecanus occidentalis</i> | Pelecanidae | |
| b | 800fr | Pink-backed Pelican, <i>Pelecanus rufescens</i> | Pelecanidae | |
| c | 800fr | Peruvian Pelican, <i>Pelecanus thagus</i> | Pelecanidae | |
| d | 800fr | American White Pelican, <i>Pelecanus erythrorhynchos</i> | Pelecanidae | |
| | Margin | R: Australian Pelican, <i>Pelecanus conspicillatus</i> | Pelecanidae | |
| N/A | SS 3300fr | Great White Pelican, <i>Pelecanus onocrotalus</i> | Pelecanidae | |
| | Margin | R: Dalmatian Pelican, <i>Pelecanus crispus</i> | Pelecanidae | |
| 2019 June 25 (Hérons) (MS/4 & SS/1) | | | | A Z |
| a | 800fr | White-faced Heron, <i>Egretta novaehollandiae</i> | Ardeidae | |
| b | 800fr | Tricolored Heron, <i>Egretta tricolor</i> | Ardeidae | |
| c | 800fr | Pacific Reef-Heron, <i>Egretta sacra</i> | Ardeidae | |
| d | 800fr | Black Heron, <i>Egretta ardesiaca</i> | Ardeidae | |
| | Margin | R: Great Blue Heron, <i>Ardea herodias</i> | Ardeidae | |
| N/A | SS 3300fr | Squacco Heron, <i>Ardeola ralloides</i> | Ardeidae | |
| | Margin | R: Great Egret, <i>Ardea alba</i> | Ardeidae | |
| 2019 June 25 (Ibises) (MS/4 & SS/1) | | | | A |
| a | 800fr | Glossy Ibis, <i>Plegadis falcinellus</i> | Threskiornithidae | |
| b | 800fr | White Ibis, <i>Eudocimus albus</i> | Threskiornithidae | |
| c | 800fr | Australian Ibis, <i>Threskiornis moluccus</i> | Threskiornithidae | |
| d | 800fr | North Bald Ibis, <i>Geronticus eremite</i> | Threskiornithidae | |
| | Margin | R: Straw-necked Ibis, <i>Threskiornis spinicollis</i> | Threskiornithidae | |
| N/A | SS 3300fr | Scarlet Ibis, <i>Eudocimus ruber</i> | Threskiornithidae | |
| | Margin | R: Black-headed Ibis, <i>Threskiornis melanocephalus</i> | Threskiornithidae | |
| TRINIDAD & TOBAGO 2018 (Surcharges) | | | | A |
| 949 | \$1 | Fork-tailed Flycatcher, <i>Tyrannus savana</i> (Sc#511 surch) | Tyrannidae | |
| TUNISIA 2018 December 18 (Fauna) (Set/4 & SS/4) | | | | A |
| 1686 | 1d | Eurasian Magpie, <i>Pica pica</i> | Corvidae | |
| 1687a | | SS/4 (Sc#1684–87) | | |

| | | | | |
|------------------------------------|-------|--|---------------------|------------|
| TURKEY | | 2018 September 26 (Sultan Marshes National Park) (SS/1) | | A |
| 3626 | SS 2l | Greater Flamingo, <i>Phoenicopterus roseus</i> | Phoenicopteridae | |
| UKRAINE | | 2018 November 30 (Flora & Fauna of Carpathian Biosphere) (MS/6) | | A |
| 1183c | 7h | Hawfinch, <i>Coccothraustes coccothraustes</i> | Fringillidae | |
| | | 2018 December 24 (Sumy Oblast) (MS/4) | | A |
| 1194a | 7h | Boreal Owl, <i>Aegolius funereus</i> (The owl is in Desna-Starogutsky National Nature Park) | Strigidae | |
| URUGUAY | | 2018 October 9 (Tourist Destinations) (Horiz Pair) | | A |
| 2639a | 20p | Turkey Vulture, <i>Cathartes aura</i> | Cathartidae | |
| 2639b | 20p | Toco Toucan, <i>Ramphastos toco</i> | Ramphastidae | |
| Note | | Printed in sheets of four pairs plus a central label | | |
| | | 2018 November 7 (Ducks) (MS/4) | | A |
| 2645a | 22p | White-cheeked Pintail, <i>Anas bahamensis</i> | Anatidae | |
| 2645b | 22p | Yellow-billed Pintail, <i>Anas georgica</i> | Anatidae | |
| 2645c | 22p | Rosy-billed Pochard, <i>Netta peposaca</i> | Anatidae | |
| 2645d | 22p | Chiloe Wigeon, <i>Anas sibilatrix</i> | Anatidae | |
| VATICAN | | 2019 March 19 (Europa: National Birds) (Set/2) | | A |
| 1713 | €1.10 | Mallard, <i>Anas platyrhynchos</i> | Anatidae | |
| 1714 | €1.15 | Rock Dove, <i>Columba livia</i> | Columbidae | |
| VIET NAM | | 2018 August 18 (Fauna of Kon Ka Kina Natl Park) (Set/4 & SS/4) | | A |
| 3608 | 3000d | Chestnut-eared Laughingthrush, <i>Ianthocincla konkakinhensis</i> (Cap: <i>Garrula konkakinhensis</i>) (perf 13) | Leiothrichidae | Vol. 67(4) |
| 3611a | | SS/4 (Sc#3608–11) (perf 13½×13¾) | | |
| WALLIS & FUTUNA ISLANDS | | 2018 November 8 (Mangrove Conservation) (Horiz Strip/4) | | A |
| 805a | 115fr | LL: Pacific Reef-Heron, <i>Egretta sacra</i> R: Red-footed Booby, <i>Sula sula</i> | Ardeidae Sulidae | |

Flora & Fauna



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NEW BIRDS IN THE PHILATELIC AVIARY

Charles E. Braun, BU1364

Taxonomic Update

See the Clements 2019 Update following this column for detailed changes to taxonomy that affect these entries.

New Birds



MADAGASCAR SACRED IBIS, *Threskiornis bernieri* Threskiornithidae
Zil Elwanyen Sesel, 1983 July 13, Sc#61, 2.75r

Length: 23 to 38 inches, sexes alike, resident. White with a black head, neck, and tail and white or blue irises.

Habitat: Wetlands.

Range: Madagascar and Aldabra Island.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 1*.

VIRGINIA RAIL, *Rallus limicola* Rallidae

Togo, 2019 June 25, not yet cataloged, SS 3300fr (previously on a Grunay local)

Length: 8 to 10 inches, sexes alike migratory. Brown above and rusty below with a gray face and black-barred flanks.

Habitat: Marshes and irrigated fields.

Range: Breeds from southern Canada to the central U.S. Winters in the southern U.S. and from Washington to Ecuador.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 3*.



SILVERY WOOD-PIGEON, *Columba argentina* Columbidae
Guinea-Bissau, 2019 October 11, not yet cataloged, 600fr

Length: 14 to 17 inches, sexes similar, resident. Bluish gray with a black tail and wing tips.

Habitat: Mangroves, woodland, and coconut groves.

Range: Islands off southern Malaysia and western Borneo.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 4*.

BEAUTIFUL FRUIT-DOVE, *Ptilinopus pulchellus* Columbidae

Guinea-Bissau, 2019 October 11, not yet cataloged, 600fr

Length: 7 to 8 inches, sexes similar, resident. Green above and gray below with a purplish-red forehead and crown, dark reddish-purple band below the breast, and an orange belly and undertail.

Habitat: Forest.

Range: New Guinea.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 4*.





MOREPORK, *Ninox novaeseelandiae* Strigidae
Norfolk Island, 1970 July 22, Sc#133, 10c

Length: 12 inches, sexes similar, resident. White-flecked brown above and spotted brown below with a grayish-white facial disc and golden-yellow eyes.

Habitat: Forest and farmland.

Range: New Zealand, Tasmania, and Norfolk Island.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 5*.

BLACK-NEST SWIFTLET, *Aerodramus maximus* Apodidae
Malaysia, 2019 June 19, not yet cataloged, 60s

Length: 5 inches, sexes alike, resident. Glossy black-brown above and gray below with a shallow tail fork.

Habitat: Forest.

Range: Southern Myanmar to southeastern Vietnam and western Java.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 5*.



GLITTERING-BELLIED EMERALD, *Chlorostilbon lucidus* Trochilidae
Mozambique, 2019 August 16, not yet cataloged, SS 300m

Length: 3 to 4 inches, resident. The male (shown) is green with steely blue wings and tail. The female has a streaked white throat and a white stripe behind the eyes.

Habitat: Scrub, savanna, grassland, and forest edges.

Range: Eastern Brazil to northern Argentina.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 5*.

WHITE-BELLIED HUMMINGBIRD, *Amazilia chionogaster* Trochilidae
St. Thomas & Prince Islands, 2019 February 4, not yet cataloged, SS 124d

Length: 4 to 5 inches, sexes similar, resident. Green above and whitish below with green spots on the sides.

Habitat: Forest edges, shrubs, and plantations.

Range: Peru to Paraguay.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 5*.



NARCONDAM HORNBILL, *Rhyticeros narcondami* Bucerotidae
Sierra Leone, 2016 December 29, Sc#4055d, 6000le (bird on the left)

Length: 18 to 20 inches, resident. The male (shown) is black with a red head and neck and a white throat and tail. The female has a black head and neck.

Habitat: Open forest and dense bush.

Range: Narcondam Island, India.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 7*.





INDOCHINESE ROLLER. *Coracias affinis* Coraciidae
Laos, 1966 February 10, Sc#125, 45k

Length: 12 to 14 inches, sexes alike, resident. Un-streaked brownish with an azure crown, wings, and outer tail.

Habitat: Open areas and palm groves.

Range: Northeastern India to Hainan, Vietnam, and southern Thailand.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 6.*

RED-BACKED FLAMEBACK, *Dinopium psarodes* Picidae

Sri Lanka, 2003 September 27, Sc#1443x, 4.50r

Length: 10 to 12 inches, resident. The male (shown) is crimson-red above and streaked grayish below with a red crest, white supercilium and cheek to side of the neck, black eyestripe, and chin to lower neck. The female has a black forehead and forecrown.

Habitat: Woodland and forest.

Range Sri Lanka.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 7.*



COCONUT LORIKEET, *Trichoglossus haematodus* Psittaculidae
North Korea, 1975 July 10, Sc#1358, 25c

Length: 10 to 12 inches, sexes alike, resident. Green above and black-barred red below with a violet head and a yellow nuchal collar.

Habitat: Woodland, forest gardens, and plantations.

Range: New Guinea to the southern Moluccas and New Caledonia.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 4.*

RAINBOW LORIKEET, *Trichoglossus moluccanus* Psittaculidae

Turks & Caicos Islands, 1984 August 22, Sc#642, 50c

Length: 10 to 12 inches, sexes alike, resident. Green above and clear orange-red below with a violet head and pale green hindcollar.

Habitat: Woodland, forest, gardens, and plantations.

Range: Australia except the north. Introduced in New Zealand and Hong Kong.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 4.*



RED-COLLARED LORIKEET, *Trichoglossus rubritorquis* Psittaculidae
Grenada Grenadines, 2000 March 1, Sc#2147a, \$1

Length: 10 to 12 inches, sexes alike, resident. Green above and red below with a blue head and red collar.

Habitat: Woodland, forest, gardens, and plantations,

Range: Northern Australia.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 4.*



CAPE PARROT, *Poicephalus fuscicollis* Psittacidae
Ciskei, 1981 April 12, Sc#25, 50c

Length: 12 inches, resident. The male (shown) is green with a blue-tinged brownish head and neck and a black tail. The female has a red forehead.

Habitat: Mature wooded savanna.

Range: Eastern South Africa.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 4*.

VAN HASSERT'S SUNBIRD, *Leptocoma brasiliana* Nectariniidae
Sierra Leone, 2019 August 30, not yet cataloged, 12500le

Length: 4 inches, resident. The male (shown) is black and metallic purple-blue above and maroon-crimson below with a green crown and sooty-brown belly. The female is olive-tinged brown above and pale yellowish below.

Habitat: Forest, plantations, scrub, and gardens.

Range: Western Myanmar to western Java.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 13*.



EASTERN MIOMBO SUNBIRD, *Cinnyris manoensis* Nectariniidae
Botswana, 1982 August 2, Sc#304, 2t

Length: 5 inches, resident. The male (top) is green with a white belly and a broad scarlet band on the lower breast; the female (bottom) is brownish-gray above and lightly speckled pale gray below.

Habitat: Miombo woodland, gardens and parks.

Range: Central Angola to Zambia and northern Malawi.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 13*.

WESTERN MIOMBO SUNBIRD, *Cinnyris gertrudis* Nectariniidae
Zimbabwe, 2005 February 8, Sc#982, (\$40000) (inscr. "E")

Length: 5 inches, resident. The male (shown) is green with a white belly and a narrow scarlet band on the lower breast. The female is brownish-gray above and lightly speckled pale gray below.

Habitat: Miombo woodland, gardens, and parks.

Range: Zambia, Zimbabwe, and Mozambique.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 13*.



STREAKED SPIDERHUNTER, *Arachnothera magna* Nectariniidae
Djibouti, 2019 August 27, not yet cataloged, SS 1000fr

Length: 7 to 8 inches, sexes similar, resident. Black-streaked golden yellowish olive above and black-streaked white below.

Habitat: Forest, scrub, thickets, and gardens.

Range: Nepal to Vietnam and Malaysia.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 13*.



ALDABRA FODY, *Foudia aldabrana* Ploceidae
Zil Elwanyen Sesel. 1983 July 13, Sc#55, 40c

Length: 5 inches, resident. The male (shown) is blackish above and yellow below with scarlet-red head, neck and rump and a black eyestripe. The female is dark-streaked olive-green above and yellow below with a yellow streak above the eye. Habitat: Scrub, woodland, and coconut groves.

Range: Aldabra Island, Seychelles.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of*

the World, Volume 15.

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CLEMENTS 2019 UPDATE

Charles E. Braun, BU1364 & Jack R. Congrove, BU1424

The Clements 2018 taxonomic update was released by Cornell University in August. The revised taxonomic order is given in the table below.

No new families were added this year, but two families were lumped. **Cracticidae** (Bellmagpies and Allies) was merged with **Artamidae** (Woodswallows). The combined family now is called **Artamidae** (Woodswallows, Bellmagpies, and Allies).

Paradoxornithidae (Parrotbills, Wrenit, and Allies) was merged into **Sylviidae** (Sylviid Warblers). The combined family is **Sylviidae** (Sylviid Warblers, Parrotbills, and Allies). The total number of extant families in the eBird/Clements Checklist therefore is 248, with an additional extinct family (†Mohoidae: Hawaiian Honeyeaters), for a total of 249 families. The listing also extensively revises the sequence of families in the passerines, and of tyrant flycatchers and related families in the suboscines.

The table below shows the revised order of the 248 extant families accepted by Clements Checklist. The names of orders are in **BOLD CAPITAL** lettering and changes are noted in **bold blue** font. An additional extinct family (†Mohoidae: Hawaiian Honeyeaters) is listed. The listing also provides the quantity of families in each order (in parentheses, after the name of each order), and the quantity of species in each family (in parentheses, after the name of each family).

| No. | Family | Members | No. | Family | Members |
|-----|--------------------------------|--|-----|-------------------------------|---|
| | STRUTHIONIFORMES (1) | | | MESITORNITHIFORMES (1) | |
| 1 | Struthionidae | Ostrich (2) | 17 | Mesitornithidae | Mesites (3) |
| | RHEIFORMES (1) | | | PTEROCLIFORMES (1) | |
| 2 | Rheidae | Rheas (2) | 18 | Pteroclididae | Sandgrouse (16) |
| | TINAMIFORMES (1) | | | OTIDIFORMES (1) | |
| 3 | Tinamidae | Tinamous (46) | 19 | Otididae | Bustards (26) |
| | CASUARIIFORMES (1) | | | MUSOPHAGIFORMES (1) | |
| 4 | Casuariidae | Cassowaries & Emu (4) | 20 | Musophagidae | Turacos (23) |
| | APTERYGIFORMES (1) | | | CUCULIFORMES (1) | |
| 5 | Apterygidae | Kiwis (5) | 21 | Cuculidae | Cuckoos (147) |
| | ANSERIFORMES (3) | | | CAPRIMULGIFORMES (8) | |
| 6 | Anhimidae | Screamers (3) | 22 | Podargidae | Frogmouths (16) |
| 7 | Anseranatidae | Magpie Goose (1) | 23 | Caprimulgidae | Nightjars & Allies (98) |
| 8 | Anatidae | Ducks, Geese, & Waterfowl (174) | 24 | Nyctibiidae | Potoos (7) |
| | GALLIFORMES (5) | | 25 | Steatornithidae | Oilbird (1) |
| 9 | Megapodiidae | Megapodes (22) | 26 | Aegothelidae | Owlet-Nightjars (10) |
| 10 | Cracidae | Guans, Chachalacas, & Curassows (54) | 27 | Apodidae | Swifts (112) |
| 11 | Numididae | Guineafowl (6) | 28 | Hemiprocnidae | Treeswifts (4) |
| 12 | Odontophoridae | New World Quail (33) | 29 | Trochilidae | Hummingbirds (349) |
| 13 | Phasianidae | Pheasants, Grouse, & Allies (180) | | OPISTHOCOMIFORMES (1) | |
| | PHOENICOPTERIFORMES (1) | | 30 | Opisthocomidae | Hoatzin (1) |
| 14 | Phoenicopteridae | Flamingos (6) | | GRUIFORMES (6) | |
| | PODICIPEDIFORMES (1) | | 31 | Sarothruridae | Flufftails (11) |
| 15 | Podicipedidae | Grebes (22) | 32 | Rallidae | Rails, Gallinules, & Coots (159) |
| | COLUMBIFORMES (1) | | 33 | Heliornithidae | Finfoots (3) |
| 16 | Columbidae | Pigeons & Doves (348) | 34 | Aramidae | Limpkin (1) |

| No. | Family | Members | No. | Family | Members |
|-----|-------------------------------|-------------------------------|-----|----------------------------|----------------------------------|
| | GRUIFORMES (continued) | | | PELECANIFORMES (5) | |
| 35 | Psophiidae | Trumpeters (3) | 70 | Pelecanidae | Pelicans (8) |
| 36 | Gruidae | Cranes (15) | 71 | Balaenicipitidae | Shoebill (1) |
| | CHARADRIIFORMES (19) | | 72 | Scopidae | Hamerkop (1) |
| 37 | Chionidae | Sheathbills (2) | 73 | Ardeidae | Herons, Egrets, & Bitterns (68) |
| 38 | Pluvianellidae | Magellanic Plover (1) | 74 | Threskiornithidae | Ibises & Spoonbills (36) |
| 39 | Burhinidae | Thick-knees (10) | | CATHARTIFORMES (1) | |
| 40 | Pluvianidae | Egyptian Plover (1) | 75 | Cathartidae | New World Vultures (7) |
| 41 | Recurvirostridae | Stilts & Avocets (9) | | ACCIPITRIFORMES (3) | |
| 42 | Ibidorhynchidae | Ibisbill (1) | 76 | Sagittariidae | Secretary-bird (1) |
| 43 | Haematopodidae | Oystercatchers (12) | 77 | Pandionidae | Osprey (1) |
| 44 | Charadriidae | Plovers & Lapwings (67) | 78 | Accipitridae | Hawks, Eagles, & Kites (250) |
| 45 | Pedionomidae | Plains-wanderer (1) | | STRIGIFORMES (2) | |
| 46 | Thinocoridae | Seedsnipes (4) | 79 | Tytonidae | Barn-Owls (18) |
| 47 | Rostratulidae | Painted-Snipes (3) | 80 | Strigidae | Owls (216) |
| 48 | Jacanidae | Jacanas (8) | | COLIIFORMES (1) | |
| 49 | Scolopacidae | Sandpipers & Allies (96) | 81 | Coliidae | Mousebirds (6) |
| 50 | Turnicidae | Buttonquail (17) | | LEPTOSOMIFORMES (1) | |
| 51 | Dromadidae | Crab Plover (1) | 82 | Leptosomidae | Cuckoo-Roller (1) |
| 52 | Glareolidae | Pratincoles & Coursers (17) | | TROGONIFORMES (1) | |
| 53 | Stercorariidae | Skuas & Jaegers (7) | 83 | Trogonidae | Trogons (43) |
| 54 | Alcidae | Auks, Murres, & Puffins (25) | | BUCEROTIFORMES (4) | |
| 55 | Laridae | Gulls, Terns, & Skimmers (97) | 84 | Upupidae | Hoopoes (3) |
| | EURYPYGIFORMES (2) | | 85 | Phoeniculidae | Woodhoopoes & Scimitar-bills (8) |
| 56 | Rhynochetidae | Kagu (1) | 86 | Bucorvidae | Ground-Hornbills (2) |
| 57 | Eurypygidae | Sunbittern (1) | 87 | Bucerotidae | Hornbills (59) |
| | PHAETHONTIFORMES (1) | | | CORACIIFORMES (6) | |
| 58 | Phaethontidae | Tropicbirds (3) | 88 | Todidae | Todies (5) |
| | GAVIIFORMES (1) | | 89 | Momotidae | Motmots (14) |
| 59 | Gaviidae | Loons (5) | 90 | Alcedinidae | Kingfishers (118) |
| | SPHENISCIFORMES (1) | | 91 | Meropidae | Bee-eaters (28) |
| 60 | Spheniscidae | Penguins (18) | 92 | Coraciidae | Rollers (13) |
| | PROCELLARIIFORMES (4) | | 93 | Brachypteraciidae | Ground-Rollers (5) |
| 61 | Diomedeidae | Albatrosses (15) | | GALBULIFORMES (2) | |
| 62 | Oceanitidae | Southern Storm Petrels (9) | 94 | Bucconidae | Puffbirds (36) |
| 63 | Hydrobatidae | Storm-Petrels (18) | 95 | Galbulidae | Jacamars (18) |
| 64 | Procellariidae | Shearwaters & Petrels (96) | | PICIFORMES (7) | |
| | CICONIIFORMES (1) | | 96 | Lybiidae | African Barbets (41) |
| 65 | Ciconiidae | Storks (19) | 97 | Megalaimidae | Asian Barbets (34) |
| | SULIFORMES (4) | | 98 | Capitonidae | New World Barbets (14) |
| 66 | Fregatidae | Frigatebirds (5) | 99 | Semnornithidae | Toucan-Barbets (2) |
| 67 | Sulidae | Boobies & Gannets (10) | 100 | Ramphastidae | Toucans (36) |
| 68 | Anhingidae | Anhingas (4) | 101 | Indicatoridae | Honeyguides (17) |
| 69 | Phalacrocoracidae | Cormorants & Shags (40) | 102 | Picidae | Woodpeckers (234) |

| No. | Family | Members | No. | Family | Members |
|-----|-------------------------------------|--|-----|----------------------------------|---|
| | CARIAMIFORMES (1) | | | PASSERIFORMES (continued) | |
| 103 | Cariamidae | Seriemas (2) | 144 | Oreoicidae | Australo-Papuan Bellbirds (3) |
| | FALCONIFORMES (1) | | 145 | Falcunculidae | Shrike-tit (1) |
| 104 | Falconidae | Falcons & Caracaras (66) | 146 | Paramythiidae | Tit & Crested Berrypeckers (2) |
| | PSITTACIFORMES (4) | | 147 | Vireonidae | Vireos, Shrike-Babblers, & Erpornis (63) |
| 105 | Strigopidae | New Zealand Parrots (4) | 148 | Pachycephalidae | Whistlers & Allies (57) |
| 106 | Cacatuidae | Cockatoos (21) | 149 | Oriolidae | Old World Orioles (38) |
| 107 | Psittaculidae | Old World Parrots (189) | 150 | Machaerirhynchidae | Boatbills (2) |
| 108 | Psittacidae | New World & African Parrots (173) | 151 | Artamidae | Woodswallows, Bellmagpies, Allies (24) |
| | PASSERIFORMES (141) | | 152 | Rhagologidae | Mottled Berryhunter (1) |
| 109 | Acanthisittidae | New Zealand Wrens (4) | 153 | Platysteiridae | Wattle-eyes & Batises (31) |
| 110 | Calyptomenidae | African & Green Broadbills (6) | 154 | Vangidae | Vangas, Helmetshrikes & Allies (39) |
| 111 | Eurylaimidae | Asian & Grauer's Broadbills (9) | 155 | Pityriaseidae | Bristlehead (1) |
| 112 | Sapayoidae | Sapayoa (1) | 156 | Aegithinidae | Ioras (4) |
| 113 | Philepittidae | Asities (4) | 157 | Malaconotidae | Bushshrikes & Allies (50) |
| 114 | Pittidae | Pittas (44) | 158 | Rhipiduridae | Fantails (53) |
| 115 | Thamnophilidae | Typical Antbirds (234) | 159 | Dicruridae | Drongos (29) |
| 116 | Melanopareiidae | Crescentchests (4) | 160 | Paradisaeidae | Birds-of-paradise (42) |
| 117 | Conopophagidae | Gnateaters (11) | 161 | Ifritidae | Ifrita (1) |
| 118 | Grallariidae | Antpittas (55) | 162 | Monarchidae | Monarch Flycatchers (100) |
| 119 | Rhinocryptidae | Tapaculos (60) | 163 | Corcoracidae | White-winged Chough & Apostlebird (2) |
| 120 | Formicariidae | Anthrushes (11) | 164 | Melampittidae | Melampittas (2) |
| 121 | Furnariidae | Ovenbirds & Woodcreepers (304) | 165 | Platylophidae | Crested Shrikejay (1) |
| 122 | Pipridae | Manakins (53) | 166 | Laniidae | Shrikes (33) |
| 123 | Cotingidae | Cotingas (65) | 167 | Corvidae | Crows, Jays, & Magpies (129) |
| 124 | Tityridae | Tityras & Allies (33) | 168 | Cnemophilidae | Satinbirds (3) |
| 125 | Oxyruncidae | Sharpbill, Royal Flycatcher, Allies (7) | 169 | Melanocharitidae | Berrypeckers & Longbills (10) |
| 126 | Tyrannidae | Tyrant Flycatchers (422) | 170 | Callaeidae | Wattlebirds (5) |
| 127 | Menuridae | Lyrebirds (2) | 171 | Notiomystidae | Stitchbird (1) |
| 128 | Atrichornithidae | Scrub-birds (2) | 172 | Petroicidae | Australasian Robins (49) |
| 129 | Ptilonorhynchidae | Bowerbirds (27) | 173 | Picathartidae | Rockfowl (2) |
| 130 | Climacteridae | Australasian Treecreepers (7) | 174 | Chaetopidae | Rockjumpers (2) |
| 131 | Maluridae | Fairywrens (33) | 175 | Eupetidae | Rail-babbler (1) |
| 132 | Meliphagidae | Honeyeaters (187) | 176 | Hylotidae | Hyliotas (4) |
| 133 | Dasyornithidae | Bristlebirds (3) | 177 | Stenostiridae | Fairy Flycatchers (9) |
| 134 | Pardalotidae | Pardalotes (4) | 178 | Paridae | Tits, Chickadees & Titmice (63) |
| 135 | Acanthizidae | Thornbills & Allies (65) | 179 | Remizidae | Penduline-Tits (11) |
| 136 | Pomatostomidae | Pseudo-Babblers (5) | 180 | Alaudidae | Larks (97) |
| 137 | Orthonychidae | Logrunners (3) | 181 | Panuridae | Bearded Reedling (1) |
| 138 | Cinclosomatidae | Quail-thrushes & Jewel-babblers (12) | 182 | Nicatoridae | Nicators (3) |
| 139 | Campephagidae | Cuckooshrikes (89) | 183 | Macrosphenidae | African Warblers (21) |
| 140 | Mohouidae | Whiteheads (3) | 184 | Cisticolidae | Cisticolas & Allies (155) |
| 141 | Neosittidae | Sittellas (3) | 185 | Acrocephalidae | Reed-Warblers & Allies (61) |
| 142 | Psophodidae | Whipbirds & Wedgebills (5) | 186 | Locustellidae | Grassbirds & Allies (62) |
| 143 | Eulacestomatidae | Ploughbill (1) | 187 | Donacobiidae | Donacobius (1) |

| No. | Family | Members | No. | Family | Members |
|-----|----------------------------------|---|-----|----------------------------------|---|
| | PASSERIFORMES (continued) | | | PASSERIFORMES (continued) | |
| 188 | Bernieridae | Malagasy Warblers (11) | 219 | Promeropidae | Sugarbirds (2) |
| 189 | Pnoepygidae | Cupwings (5) | 220 | Modulatricidae | Dapple-throat and Allies (3) |
| 190 | Hirundinidae | Swallows (86) | 221 | Dicaeidae | Flowerpeckers (47) |
| 191 | Pycnonotidae | Bulbuls (149) | 222 | Nectariniidae | Sunbirds & Spiderhunters (143) |
| 192 | Phylloscopidae | Leaf-Warblers (77) | 223 | Irenidae | Fairy-bluebirds (2) |
| 193 | Scotocercidae | Bush-Warblers & Allies (36) | 224 | Chloropseidae | Leafbirds (11) |
| 194 | Aegithalidae | Long-tailed Tits (11) | 225 | Peucedramidae | Olive Warbler (1) |
| 195 | Sylviidae | Sylviid Warblers, Parrotbills, Allies (68) | 226 | Urocynchramidae | Przevalski's Pinktail (1) |
| 196 | Zosteropidae | Yuhinas, White-eyes, & Allies (136) | 227 | Ploceidae | Weavers & Allies (118) |
| 197 | Timaliidae | Tree- & Scimitar-Babblers & Allies (52) | 228 | Estrildidae | Waxbills & Allies (139) |
| 198 | Pellorneidae | Ground Babblers & Allies (59) | 229 | Viduidae | Indigobirds (20) |
| 199 | Leiotherichidae | Laughingthrushes & Allies (146) | 230 | Prunellidae | Accentors (13) |
| 200 | Regulidae | Kinglets (6) | 231 | Passeridae | Old World Sparrows (43) |
| 201 | Tichodromidae | Wallcreeper (1) | 232 | Motacillidae | Wagtails & Pipits (68) |
| 202 | Sittidae | Nuthatches (27) | 233 | Fringillidae | Finches, Euphonias, & Allies (227) |
| 203 | Certhiidae | Treecreepers (11) | 234 | Calcariidae | Longspurs & Snow Buntings (6) |
| 204 | Poliopitilidae | Gnatcatchers (20) | 235 | Rhodinocichlidae | Thrush-Tanager (1) |
| 205 | Troglodytidae | Wrens (85) | 236 | Emberizidae | Old World Buntings (44) |
| 206 | Elachuridae | Spotted Elachura (1) | 237 | Passerellidae | New World Sparrows (131) |
| 207 | Cinclidae | Dippers (5) | 238 | Calyptophilidae | Chat-Tanagers (2) |
| 208 | Buphagidae | Oxpeckers (2) | 239 | Phaenicophilidae | Hispaniolan Tanagers (4) |
| 209 | Sturnidae | Starlings (123) | 240 | Nesospingidae | Puerto Rican Tanager (1) |
| 210 | Mimidae | Mockingbirds & Thrashers (34) | 241 | Spindalidae | Spindalises (21) |
| 211 | Turdidae | Thrushes & Allies (173) | 242 | Zeledoniidae | Wrenthrush (1) |
| 212 | Muscicapidae | Old World Flycatchers (322) | 243 | Teretistridae | Cuban Warblers (2) |
| 213 | Bombycillidae | Waxwings (3) | 244 | Icteriidae | Yellow-breasted Chat (1) |
| 214 | †Mohoidae | Hawaiian Honeyeaters (5) [extinct] | 245 | Icteridae | Troupials & Allies (35) |
| 215 | Ptiligonatidae | Silky-flycatchers (4) | 246 | Parulidae | New World Warblers (110) |
| 216 | Dulidae | Palmchat (1) | 247 | Mitrospingidae | Mitrospingid Tanagers (4) |
| 217 | Hylocitridae | Hylocitrea (1) | 248 | Cardinalidae | Cardinals & Allies (113) |
| 218 | Hypocoliidae | Hypocolius (1) | 249 | Thraupidae | Tanagers & Allies (377) |
| | | | | | |

Reference: Clements, J. F., T. S. Schulenberg, M. J. Iliff, S. M. Billerman, T. A. Fredericks, B. L. Sullivan, and C. L. Wood. 2019. *The eBird/Clements checklist of birds of the world: v2019*. Downloaded from <http://www.birds.cornell.edu/clementschecklist/download/>

Changes Affecting Birds on Stamps

Change White Eared-Pheasant to Tibetan Eared-Pheasant (*Crossoptilon harmani*). Change the range to eastern Tibet and northeastern India.

Change Madagascar Green-Pigeon to Comoros Green-Pigeon (*Treron xenius*).

Blue-throated Hillstar (*Oreotrochilus cyanolaemus*) is now recognized as a true species [Vol. 68(1)].

Change Steely-vented Hummingbird to Blue-vented Hummingbird (*Saucerottia hoffmanni*) and change the range to western Nicaragua to central Costa Rica.

Change Tristan Moorhen to Gough Moorhen (*Gallinula comeri*) and change the range to Gough Island.

Sacred Ibis has been split into two species, African Sacred Ibis (*Threskiornis aethiopicus*) and Madagascar Sacred Ibis (*T. bernieri*), on issues from British Indian Ocean Territories, Madagascar 1999, Seychelles, and Zil Elwanyen Sesel (see “New Birds”).

Change Reunion Harrier to Madagascar Harrier (*Circus macroscelus*).

Morepork (*Ninox novaeseelandiae*) has been (re)split from Southern Boobook on issues from Angola, Mozambique, New Zealand, Norfolk Island, Palau, St. Thomas & Prince, Solomon Islands, and Tuvalu (see “New Birds”).

Indochinese Roller (*Coracias affinis*) has been split from the Indian Roller on issues from Laos and the Maldiv Islands (see “New Birds”).

Red-backed Flameback (*Dinopium psarodes*) has been split from Black-backed Flameback on an issue from Sri Lanka (see “New Birds”).

Rainbow Lorikeet has been split into six species. Three are on stamps: Rainbow Lorikeet (*Trichoglossus molucannus*), Coconut Lorikeet (*T. haematodus*) (issues from Antigua and Barbuda, Brazil, Central Africa, Grenada, Guyana, Indonesia, Kampuchea, North Korea, Micronesia, Mozambique, New Caledonia, Niger, Palau, Papua New Guinea, Sierra Leone, and Solomon Islands), and Red-collared Lorikeet (*T. rubritorquis*) (issues from Congo, Grenadines, Mozambique, St. Thomas & Prince, and Zambia) (see “New Birds”).

Brown-necked Parrot has been split into two species: Brown-necked Parrot (*Poicephalus fuscicollis*) (issues from Guinea-Bissau and Zimbabwe) and Cape Parrot (*P. robustus*) (see “New Birds”).

Change Flame Bowerbird to Masked Bowerbird (*Sericulus aureus*).

Change Oriental White-eye to Indian White-eye.

Miombo Sunbird is split into Eastern Miombo Sunbird (*Cinnyris manoensis*) (issues from Botswana and Ghana) and Western Miombo Sunbird (*C. gertrudis*) (issue from Zimbabwe) (see “New Birds”).

Aldabra Fody (*Foudia aldabrana*) (issues from Seychelles and Zil Elwanyen Sesel) is split from Red-headed Fody (*F. eminentissima*) (issues from British Indian Ocean Territory, Comoro Islands, and Mayotte) (see “New Birds”).

Royal Sunangel (*Heliangelus regalis*) (Peru 2013) is a hybrid.

Red-billed Gull is a subspecies of Silver Gull.

Change African Quailfinch to Quailfinch (*Ortygospiza atricollis*).

Transfer Royal Flycatcher and Ruddy-tailed Flycatcher to the family Oxyruncidae.

Individual Changes:

Ground-Dove to Ground Dove (all species)

Maroon-chested Ground Dove (*Paraclaravis mondetouri*)

Purple-winged Ground Dove (*Paraclaravis geoffroyi*)

Pink-necked Pigeon to Pink-necked Green-Pigeon

Orange-breasted Pigeon to Orange-breasted Green-Pigeon

Thick-billed Pigeon to Thick-billed Green-Pigeon

Yellow-footed Pigeon to Yellow-footed Green-Pigeon

Yellow-vented Pigeon to Yellow-vented Green-Pigeon

Wedge-Tailed Pigeon to Wedge-tailed Green-Pigeon

White-bellied Pigeon to White-bellied Green-Pigeon

Indian Bustard to Great Indian Bustard

Racket-tailed Coquette to Racket-tailed Thorntail

Amethyst-throated Hummingbird to Amethyst-throated Mountain-gem

Blue-throated Hummingbird to Blue-throated Mountain-gem

Magenta-throated Woodstar (*Philodice bryantae*)

Purple-throated Woodstar (*Philodice mitchellii*)

Bahama Woodstar (*Nesophlox evelynae*)

Individual Changes: (continued)

Lesser Woodhen (*Paragallinula angulata*)
 Spoon-billed Sandpiper (*Calidris pygmaea*)
 Black-breasted Snake-Eagle to Black-chested Snake-Eagle
 Rufous-chested Sparrowhawk to Rufous-breasted Sparrowhawk
 Northern Silvery-Kingfisher (*Ceyx flumenicola*)
 Thick-billed Vireo to Mangrove Vireo
 Black-collared Apalis (*Oreolais pulcher*)
 Red-billed Oxpecker (*Buphagus erythrorhynchus*)
 Dusky-brown Flycatcher to African Dusky Flycatcher
 Grayish Flycatcher to African Gray Flycatcher
 Buff-streaked Bushchat to Buff-streaked Chat (*Campocoloides bifasciatus*)
 Mountain Wheatear (*Myrmecocichla monticola*)
 Long-billed Sunbird to Loten's Sunbird
 Gould's Sunbird to Mrs. Gould's Sunbird
 Purple-naped Spiderhunter (*Kurochkinogramma hypogrammicum*)
 Cuban Grassquit (*Phonipara canorus*)
 Nashville Warbler (*Leiothlypis ruficapilla*)
 Golden-naped Tanager (*Chalcothraupis ruficervix*)
 Black-necked Tanager (*Tangara cyanicollis*)
 Chestnut-backed Tanager (*Tangara preciosa*)
 Burnished-buff Tanager (*Tangara cayana*)
 Lesser Antillean Tanager (*Tangara cucullata*)
 Scrub Tanager (*Tangara vitriolina*)
 Masked Tanager (*Tangara nigricincta*)
 Golden-hooded Tanager (*Tangara larvata*)
 Blue-necked Tanager (*Tangara cyanicollis*)

MOLDOVA BIRDS

The year 2019 has been a banner year for birds on stamps. Each year, the PostEurop Association, formerly called the European Conference of Postal and Telecommunications Administrations (CEPT), designates a theme for its Europa stamp issues, and this year the theme was "National Birds." Europe is home to almost 900 species of birds, and many are shown on Europa stamps.



Aquila chrysaetos
 Moldova, 2019, Sc#1032

Ciconia ciconia
 Moldova, 2019, Sc#1031

On 19 April 2019, Moldova issued a set of two stamps as part of the Europa theme. They are both denominated 11 lei. One depicts a Golden Eagle (*Aquila chrysaetos*) and the other a White Stork (*Ciconia ciconia*). The stamps were designed by Vladimir Melnic, and printed by Nova Imprim, Chisinau. They measure 68×34 mm and are perforated 13 syncopated.

Each stamp was produced in a sheet of three plus a label and the two sheets were sold with, but unattached to, a booklet cover.



HERPETOLOGY

Associate Editor

Dick Roman, LM83

New Listings



[Ed. Note: Occasionally in this section and also in the Fungi section, we will note a species that is known to be poisonous or venomous by marking it with a (☠) symbol. One should not infer that other species that are not so marked are non-poisonous or non-venomous or safe to handle/eat.]

| Scott# | Denom | Common Name/Scientific Name | Family/Subfamily | Code |
|---|----------|---|--------------------------|------|
| ANGOLA | | | | |
| 2018 December 10 (Fishes) (Set/4) | | | | |
| 1507 | 300k | Green Sea Turtle, <i>Chelonia mydas</i> | Cheloniidae, Cheloniinae | B |
| 2018 December 10 (Crocodiles) (Set/4 & SS/1) | | | | |
| 1512 | 300k | West African Dwarf Crocodile, <i>Osteolaemus tetraspis</i> (facing L) | Crocodylidae | A |
| 1513 | 300k | Same species (facing R) | Crocodylidae | A |
| 1514 | 300k | Nile Crocodile, <i>Crocodylus niloticus</i> (facing R) | Crocodylidae | A |
| 1515 | 300k | Same species (facing L) | Crocodylidae | A |
| 1563 | SS 1200k | Nile Crocodile, <i>Crocodylus niloticus</i> | Crocodylidae | A |
| | Margin | LL & R: Same species | Crocodylidae | Z |
| 2018 December 10 (Snakes) (Set/4 & SS/1) | | | | |
| 1516 | 300k | Jameson's Mamba, <i>Dendroaspis jamesoni</i> (☠) | Elapidae | A |
| 1517 | 300k | Horned Adder, <i>Bitis caudalis</i> (☠) | Viperidae, Viperinae | A |
| 1518 | 300k | Puff Adder, <i>Bitis arietans</i> (☠) | Viperidae, Viperinae | A |
| 1519 | 300k | Anchieta's Cobra, <i>Naja anchietae</i> (☠) | Elapidae | A |
| 1564 | SS 1200k | Horned Adder, <i>Bitis caudalis</i> (☠) | Viperidae, Viperinae | A |
| | Margin | LR: Black Mamba, <i>Dendroaspis polylepis</i> (☠) | Elapidae | Z |
| | | LL: Puff Adder, <i>Bitis arietans</i> (☠) | Viperidae, Viperinae | Z |
| | | ML: Anchieta's Cobra, <i>Naja anchietae</i> (☠) | Elapidae | Z |
| 2018 December 10 (Sea Turtles) (Set/4 & SS/1) | | | | |
| 1520 | 300k | Loggerhead Sea Turtle, <i>Caretta caretta</i> | Cheloniidae | A |
| 1521 | 300k | Leatherback Sea Turtle, <i>Dermochelys coriacea</i> | Dermochelyidae | A |
| 1522 | 300k | Olive Ridley Sea Turtle, <i>Lepidochelys olivacea</i> | Cheloniidae | A |
| 1523 | 300k | Hawksbill Sea Turtle, <i>Eretmochelys imbricata</i> | Cheloniidae | A |
| 1565 | SS 1200k | Green Sea Turtle, <i>Chelonia mydas</i> | Cheloniidae, Cheloniinae | A |
| | Margin | UR: Same species | Cheloniidae, Cheloniinae | Z |
| | | LR: Hawksbill Sea Turtle, <i>Eretmochelys imbricata</i> | Cheloniidae | Z |
| | | LL: Loggerhead Sea Turtle, <i>Caretta caretta</i> | Cheloniidae | Z |
| 2018 December 10 (Endangered Species) (SS/1) | | | | |
| 1567 | SS 1200k | African Slender-snouted Crocodile, <i>Mecistops cataphractus</i> | Crocodylidae | A |
| ANTIGUA | | | | |
| 2018 August 28 (Birth of Prince Louis) (MS/4) | | | | |
| 3421 | Margin | R: Stylized cartoon frog | | S Z |
| ASCENSION | | | | |
| 2018 December 5 (Migratory Turtles) (2ea Horiz Pair) | | | | |
| 1210a | 65p | Hawksbill Sea Turtle, <i>Eretmochelys imbricata</i> (S. America map) | Cheloniidae | A |
| 1210b | 65p | Same species (Ascension Island map) | Cheloniidae | A |
| 1211a | £1 | Green Sea Turtle, <i>Chelonia mydas</i> (South America map) | Cheloniidae, Cheloniinae | A |
| 1211b | £1 | Same species (Ascension Island map) | Cheloniidae, Cheloniinae | A |

| | | | | |
|-------------------------|-----------|--|--------------------------------|-------|
| ARGENTINA | | 2019 May 27 (Year of Pig) (SS/1) (circular) | | |
| 2868 | 200p | Stylized snake (Zodiac symbol) | | S C |
| ARUBA | | 2018 October 31 (Domestic Animals) (Set/6) | | |
| 613 | 220c | U/I Domestic Turtle | | U A |
| AUSTRALIA | | 2019 March 5 (Australian Animals) (Set/4 & Coil Strip/4) | | |
| 4943 | \$1 | Eastern Blue-Tongued Lizard, <i>Tiliqua scincoides</i> (perf 14×14¼) | Scincidae, Egerniinae | A |
| 4947 | \$1 | Same species (die cut 11¼) (s/a) | | |
| 4947a | | Bklt/10 (Sc#4947) | | |
| 4947b | | Horiz Coil Strip/4 (Sc#4944–47) | | |
| AZERBAIJAN | | 2018 December 4 (Baku Architecture) (MS/3) | | |
| 1202a | 60g | Stylized Snake carving (w/ lion facing R) | | S B |
| 1202c | 60g | Stylized Snake carving (w/ lion facing L) | | S B |
| BELARUS | | 2018 August 13 (Reptiles) (Set/3 & SS/3) | | |
| 1106 | (42k) | Viviparous Lizard, <i>Zootoca vivipara</i> | Lacertidae | A |
| 1107 | (1.38r) | Sand Lizard, <i>Lacerta agilis</i> | Lacertidae | A |
| 1108 | (1.50r) | Slow Worm, <i>Anguis fragilis</i> | Anguidae, Diploglossa | A |
| 1108a | | SS/3 (Sc#1106–08) | | |
| BHUTAN | | 2019 February 5 (Year of the Pig) (MS/12 & SS/1) | | |
| 1604f | 30nu | Stylized Snake (Zodiac symbol) | | S A |
| 1605 | SS 60nu | Stylized Snake (Zodiac symbol) | | S B |
| BOTSWANA | | 2018 August 30 (Animals) (Set/15 & SS/5) | | |
| 1047 | 10t | Kalahari Ground Gecko, <i>Pachydactylus wahlbergii</i> | Gekkonidae | A |
| 1051 | 50t | Giant African Bullfrog, <i>Pyxicephalus adspersus</i> | Pyxicephalidae, Pyxicephalinae | A |
| 1052 | 1p | Black Mamba, <i>Dendroaspis polylepis</i> (♀) | Elapidae | A |
| 1060 | 20p | Kalahari Tent Tortoise, <i>Psammobates oculiferus</i> | Testudinidae | A |
| 1060a | | SS/5 (Sc#1047, Sc#1051–52, Sc#1054, Sc#1060) | | |
| CANADA | | 2019 May 23 (Endangered Turtles) (MS/2 & Bklt/10) | | |
| 3179a | (90c) | Spotted Turtle, <i>Clemmys guttata</i> | Emydidae | A |
| 3179b | (90c) | Blanding's Turtle, <i>Emydoidea blandingii</i> | Emydidae, Emydinae | A |
| 3179c | | Bklt/10 (5ea Sc#3179a–b) | | |
| CAPE VERDE | | 2019 June 13 (2019 African Beach Games) (Set/2 & SS/1) | | |
| 1022 | 40e | Stylized Turtle (mascot symbol) | | S B |
| 1023 | 60e | Stylized Turtle (mascot symbol) | | S B |
| 1024 | SS 150e | Stylized Turtle (mascot symbol) | | S B |
| CAYMAN ISLANDS | | 2018 October 19 (60th anniv. Coat of Arms) (Single & SS/1) | | |
| 1211 | \$2 | Stylized Turtle (on coat of arms) | | S C |
| 1211a | | SS/1 (Sc#1211) | | |
| CHRISTMAS ISLAND | | 2018 January 8 (Year of the Dog) (MS/14 & Bklt/4) | | |
| 568j | 50c | Stylized Snake (Zodiac symbol) | | S B |
| 568p | | Bklt/4 (Sc#568j, Sc#568j, 2ea Sc#566) | | |
| 568 | | MS/14 (Sc#566–67 & Sc#568a–1) | | |
| | | 2018 November 1 (Christmas) (SS/2) | | |
| 575a | Margin | ML: Stylized Blue-tailed Skink, <i>Cyrtoblepharus egeriae</i> | Scincidae | S Z |
| | | LR: Stylized Green Sea Turtle, <i>Chelonia mydas</i> | Cheloniidae | S Z |
| COSTA RICA | | 2019 May 16 (Scientists) (SS/2) | | |
| 706a | SS 445col | U/I Snake (w/ Clodomiro Picado–antivenin developer) | | U B R |

ECUADOR**2018 September 13** (Green Tourism) (Block/4 & Bklt/8)

| | | | | |
|-------|-----|--|------------------------------|-----|
| 2220a | \$2 | Marine Iguana, <i>Amblyrhynchus cristatus</i> | Iguanidae, Iguania | A |
| 2220d | \$2 | Smooth-fronted Caiman, <i>Paleosuchus trigonatus</i> | Alligatoridae | A |
| | | U/I Frog (on caiman's snout) | | U C |
| 2220 | | Block/4 (Sc#2220a-d) | | |
| 2221e | 75c | Diablito, <i>Oophaga sylvatica</i> | Dendrobatidae, Dendrobatinae | A |
| 2221 | | Bklt/8 (Sc#2221a-h) | | |

2018 December 11 (San Francisco Univ. Scientific Contributions) (MS/9)

| | | | | |
|-------|--------|--|-----------------------|---|
| 2224g | \$2 | San Cristobal Lava Lizard, <i>Microlophus bivittatus</i> | Tropiduridae, Iguania | A |
| 2224h | \$2.50 | no common name, <i>Chimerella mariaelenae</i> | Centrolenidae | A |
| | | (Note: Species of glass frog, two specimens known) | | |

FIJI**2018 July 13** (Reptiles) (Set/4)

| | | | | |
|------|--------|--|-------------------------|---|
| 1400 | 38c | Perret's Nigeria Gecko or Giant Forest Gecko, <i>Cnemaspis gigas</i> | Gekkonidae | A |
| 1401 | 40c | Fiji Barred Treeskink or Gibbons' Emo Skink, <i>Emoia trossula</i> | Scincidae, Eugongylinae | A |
| 1402 | \$1.63 | Fiji Banded Iguana, <i>Brachylophus bulabula</i> | Iguanidae, Iguania | A |
| 1403 | \$5 | Ono-i-Lau Skink or Lauan Ground Skink, <i>Leiopisma alazon</i> | Scincidae | A |

FR. SOUTH. & ANTARCTIC TERR. 2019 January 2 (Tromelin Island Photovoltaic Power Plant) (SS/2)

| | | | | |
|------|-----|----------------|--|-----|
| 614b | 95c | U/I Sea Turtle | | U B |
|------|-----|----------------|--|-----|

2019 March 16 (Silhouettes of Scatter Islands Emblems) (Single)

| | | | | |
|-----|-------|----------------------------------|--|-----|
| 617 | €1.50 | Stylized Sea Turtle (silhouette) | | S C |
|-----|-------|----------------------------------|--|-----|

GERMANY**2019 March 1** (20th anniv. *The Gruffalo*) (Single & Bklt/10)

| | | | | |
|-------|-----|-----------------------------------|--|-----|
| 3088 | 70c | Stylized Snake (perf 13½×13¾) | | S C |
| 3089 | 70c | Stylized Snake (die cut 9¾) (s/a) | | S C |
| 3089a | | Bklt/10 (Sc#3089) | | |

GRENADA GRENADINES**2019 February 18** (Sea Turtles) (MS/4 & SS/1)

| | | | | |
|-------|---------|---|--------------------------|---|
| 3017a | \$4 | Leatherback Sea Turtle, <i>Dermochelys coriacea</i> | Dermochelyidae | A |
| 3017b | \$5 | Green Sea Turtle, <i>Chelonia mydas</i> | Cheloniidae, Cheloniinae | A |
| 3017c | \$6 | Loggerhead Sea Turtle, <i>Caretta caretta</i> | Cheloniidae | A |
| 3017d | \$7 | Olive Ridley Sea Turtle, <i>Lepidochelys olivacea</i> | Cheloniidae | A |
| 3018 | SS \$14 | Leatherback Sea Turtle, <i>Dermochelys coriacea</i> | Dermochelyidae | A |

GUYANA**2018 November 20** (South American Tapirs) (MS/4)

| | | | | |
|------|--------|--|--------|-----|
| 4589 | Margin | MR: Stylized Boa, <i>Boa constrictor</i> | Boidae | S Z |
|------|--------|--|--------|-----|

HONDURAS**2018 September 28** (Domesticated Animals) (Set/3)

| | | | | |
|-------|-----|---------------------------------------|---------------------------|---|
| C1423 | 30l | Pond Slider, <i>Trachemys scripta</i> | Emydidae, Deirochelyiinae | A |
|-------|-----|---------------------------------------|---------------------------|---|

HUNGARY**2019 April 5** (Captain Nemo Characters) (MS/4)

| | | | | |
|------|--------|-------------------------|--|-----|
| 4507 | Margin | ML: Stylized Sea Turtle | | S Z |
|------|--------|-------------------------|--|-----|

INDONESIA**2016 January 1** (Tourism) (Block/4)

| | | | | |
|-------|-------|---------------------------------|--|-----|
| 2440a | 3000r | U/I Sea Turtle (w/ scuba diver) | | U B |
|-------|-------|---------------------------------|--|-----|

2018 February 1 (Year of the Dog) (SS/1)

| | | | | |
|------|-----------|------------------------------------|--|-----|
| 2479 | SS Margin | LR: Stylized Snake (Zodiac symbol) | | S Z |
|------|-----------|------------------------------------|--|-----|

JAPAN**2018 July 27** (Animals) (2ea MS/10) (s/a)

| | | | | |
|-------|-----|---------------------|--|-----|
| 4220e | 62¥ | Stylized Snakes | | S A |
| 4220f | 62¥ | Stylized Sea Turtle | | S A |
| 4221h | 82¥ | Stylized Chameleon | | S A |

LIBERIA**2017 February 28** (Wolverine Frogs) (MS/4 & SS/2)

| | | | | |
|-------|----------|--|----------------|---|
| 3182a | \$180 | Wolverine Frog or Hairy Frog, <i>Trichobatrachus robustus</i> | Arthroleptidae | A |
| 3182b | \$180 | Same species (head down) | Arthroleptidae | A |
| 3182c | \$180 | Same species (head up) | Arthroleptidae | A |
| 3182d | \$180 | Same species (white bkgd) | Arthroleptidae | A |
| 3182 | Margin | LR: Same species | Arthroleptidae | Z |
| 3183a | SS \$250 | Wolverine Frog or Hairy Frog, <i>Trichobatrachus robustus</i> (head) | Arthroleptidae | A |
| 3183b | SS \$250 | Same species (head & body) | Arthroleptidae | A |
| 3183 | Margin | Top: Same species | Arthroleptidae | Z |

2017 March 14 (Wildlife) (Set/3)

| | | | | |
|------|--------|---|--------------|---|
| 3188 | \$4000 | Nile Crocodile, <i>Crocodylus niloticus</i> | Crocodylidae | A |
|------|--------|---|--------------|---|

2017 April 14 (Animals of the World) (MS/4)

| | | | | |
|-------|-------|--|------------------------------|---|
| 3196a | \$180 | Common Tree Frog, <i>Hyla leucomystax</i> (aka Malaysian Golden Gliding Frog) | Rhacophoridae, Rhacophorinae | A |
|-------|-------|--|------------------------------|---|

MALAYSIA**2018 June 5** (Sabah Tourist Attractions) (SS/1)

| | | | | |
|------|-----------|---|--------------------------|---|
| 1763 | SS Margin | LR: Green Sea Turtle, <i>Chelonia mydas</i> | Cheloniidae, Cheloniinae | Z |
|------|-----------|---|--------------------------|---|

MALDIVES ISLANDS**2016 June 13** (Personalized) (Single & SS/1)

| | | | | |
|-------|-----|---|--------------------------|---|
| 3659 | 10r | Green Sea Turtle, <i>Chelonia mydas</i> | Cheloniidae, Cheloniinae | A |
| 3659a | | SS/1 (Sc#3659) | | |

2016 July 20 (Monitor Lizards) (MS/4 & SS/1)

| | | | | |
|-------|--------|--|----------------------|---|
| 3695a | 22r | Bengal Monitor, <i>Varanus bengalensis</i> | Varanidae, Platynota | A |
| 3695b | 22r | Black Tree Monitor <i>Varanus beccarii</i> | Varanidae, Platynota | A |
| 3695c | 22r | Ridgetail Monitor <i>Varanus acanthurus</i> | Varanidae, Platynota | A |
| 3695d | 22r | Komodo Dragon, <i>Varanus komodoensis</i> | Varanidae, Platynota | A |
| 3705 | SS 70r | Crocodile Monitor, <i>Varanus salvadorii</i> | Varanidae, Platynota | A |

2016 October 17 (Underwater Beauty) (MS/10)

| | | | | |
|-------|----|-------------------------------|--|-----|
| 3767e | 5r | U/I Sea Turtle (w/ reef fish) | | U B |
|-------|----|-------------------------------|--|-----|

2016 November 17 (Turtles) (MS/4 & SS/1)

| | | | | |
|-------|--------|---|--------------------------|---|
| 3781a | 22r | Leatherback Sea Turtle, <i>Dermochelys coriacea</i> | Dermochelyidae | A |
| 3781b | 22r | Barbour's Map Turtle, <i>Graptemys barbouri</i> | Emydidae, Deirochelyinae | A |
| 3781c | 22r | Spotted Turtle, <i>Clemmys guttata</i> | Emydidae | A |
| 3781d | 22r | Loggerhead Sea Turtle, <i>Caretta caretta</i> | Cheloniidae | A |
| 3791 | SS 70r | Mata, <i>Chelus fimbriata</i> | Chelidae | A |

MARSHALL ISLANDS**2018 September 8** (Year of the Dog) (MS/12)

| | | | | |
|-------|-----|--------------------------------|--|-----|
| 1212f | 60c | Stylized Snake (Zodiac symbol) | | S A |
|-------|-----|--------------------------------|--|-----|

MEXICO**2018 November 16** (Tortoise) (Single)

| | | | | |
|------|-----|--|--------------|---|
| 3128 | 15p | Mexican Bolson Tortoise, <i>Gopherus flavomarginatus</i> | Testudinidae | A |
|------|-----|--|--------------|---|

MOZAMBIQUE**2000?** (Surcharges)

| | | | | |
|------|-------|--|-----------|---|
| 1389 | 1000m | Common African Toad, <i>Amietophrynus regularis</i> (Sc#964 surch) | Bufonidae | A |
|------|-------|--|-----------|---|

NETHERLANDS**2018 January 2** (Reptiles & Amphibians) (MS/10)

Note: Each stamp is captioned with the Dutch name.

| | | | | |
|-------|-------|--|---------------|---|
| 1558a | (83c) | Viviparous Lizard, <i>Zootoca vivipara</i> | Lacertidae | A |
| 1558b | (83c) | Natterjack Toad, <i>Epidalea calamita</i> | Bufonidae | A |
| 1558c | (83c) | Northern Crested Newt, <i>Triturus cristatus</i> | Salamandridae | A |
| 1558d | (83c) | Common European Adder, <i>Vipera berus</i> (♀) | Viperidae | A |
| 1558e | (83c) | European Tree Frog, <i>Hyla arborea</i> | Hylidae | A |

NETHERLANDS (continued)

| | | | | |
|-------|-------|--|----------------|---|
| 1558f | (83c) | Yellow-bellied Toad, <i>Bombina variegata</i> | Bombinatoridae | A |
| 1558g | (83c) | Smooth Snake, <i>Coronella austriaca</i> | Colubridae | A |
| 1558h | (83c) | Grass Snake, <i>Natrix natrix</i> | Colubridae | A |
| 1558i | (83c) | Moor Frog, <i>Rana arvalis</i> | Ranidae | A |
| 1558j | (83c) | Common Spadefoot Toad, <i>Pelobates fuscus</i> | Pelobatidae | A |

NEW CALEDONIA**2019 February 5** (Year of the Dog) (MS/12)

| | | | | |
|-------|------|--------------------------------|--|-----|
| 1251a | 75fr | Stylized Snake (Zodiac symbol) | | S C |
| 1251c | 75fr | Stylized Snake (Zodiac symbol) | | S C |
| 1251d | 75fr | Stylized Snake (Zodiac symbol) | | S A |

2019 March 14 (New Caledonia Lagoons) (Single)

| | | | | |
|------|-------|---------------------|--|-----|
| 1252 | 110fr | Stylized Sea Turtle | | S A |
|------|-------|---------------------|--|-----|

PALAU**2018 June 26** (Marine Life Preservation) (SS/2)

| | | | | |
|-------|-----------|---|--------------------------|---|
| 1381b | SS \$1.50 | Green Sea Turtle, <i>Chelonia mydas</i> | Cheloniidae, Cheloniinae | A |
|-------|-----------|---|--------------------------|---|

2018 November 9 (Sea Turtles) (MS/6)

| | | | | |
|-------|--------|---|--------------------------|---|
| 1392a | 50c | Green Sea Turtle, <i>Chelonia mydas</i> | Cheloniidae, Cheloniinae | A |
| 1392b | 75c | Same species | Cheloniidae, Cheloniinae | A |
| 1392c | \$1 | Hawksbill Sea Turtle, <i>Eretmochelys imbricata</i> | Cheloniidae | A |
| 1392d | \$1.25 | Same species | Cheloniidae | A |
| 1392e | \$1.50 | Loggerhead Sea Turtle, <i>Caretta caretta</i> | Cheloniidae | A |
| 1392f | \$1.75 | Same species | Cheloniidae | A |

PERU**2019 February 22** (Year of the Dog) (Horiz Pair)

| | | | | |
|-------|----|--------------------------------|--|-----|
| 1981a | 6s | Stylized Snake (Zodiac symbol) | | S C |
|-------|----|--------------------------------|--|-----|

PHILIPPINES**2017 August 16** (Snakes) (Block/4 & SS/4)

| | | | | |
|--------|--------|--|------------------------------|---|
| 3735a | 12p | Philippine Forest Cat Snake, <i>Boiga philippina</i> (☞) | Colubridae, Colubrinae | A |
| 3735b | 12p | Luzon Forest Cat Snake, <i>Boiga dendrophila</i> ssp. <i>divergens</i> (☞) | Colubridae, Colubrinae | A |
| 3735c | 12p | Yellow spotted Philippine Pit Viper, <i>Trimeresurus flavomaculatus</i> | Viperidae, Crotalinae | A |
| 3735d | 12p | Red-tailed Blind Snake, <i>Malayotyphlops ruficauda</i> | Typhlopidae | A |
| 3736a | SS 25p | Philippine Variable Paradise Snake, <i>Chrysopelea paradisi</i> ssp. <i>variabilis</i> | Colubridae | A |
| 3736b | SS 25p | Eastern Visayas Wolf Snake, <i>Lycodon ferroni</i> | Lamprophiidae, Lamprophiinae | A |
| 3736c | SS 25p | Zigzag-lined Keelback, <i>Rhabdophis lineatus</i> | Colubridae, Natricinae | A |
| 3736d | SS 25p | Philippine Whip Snake, <i>Dryophiops philippina</i> | Colubridae, Colubrinae | A |
| Margin | | R: Yellow spotted Philippine Pit Viper, <i>Trimeresurus flavomaculatus</i> | Viperidae, Crotalinae | Z |

ROMANIA**2018 August 17** (Flora/Fauna Domogled-Cerna Valley N.P.) (Set/4 & SS/1)

| | | | | |
|--------|-----------|---|--------------|-----|
| 6160 | 5l | Hermann's Tortoise, <i>Testudo hermanni</i> | Testudinidae | A |
| 6160a | | MS/5+1 label (Sc#6160) | | |
| 6162 | SS 28.50l | Aesculapian Snake, <i>Zamenis longissimus</i> | Colubridae | A |
| Note | | SS/4 (Sc#6158–61) (printed in limited quantities) | | |
| Margin | | Stylized Snake silhouette (part of N.P. logo) | | S Z |

ST. THOMAS & PRINCE ISLANDS **2016 November 10** (Birds of Prey) (Block/6)

| | | | | |
|-------|--------|----------------------------|--|-----|
| 3197f | 20000d | U/I Snake (in bird's beak) | | U B |
|-------|--------|----------------------------|--|-----|

2017 March 13 (Turtles)

| | | | | |
|--------|------------|--|--------------------|---|
| 3249a | 31000d | Eastern Box Turtle, <i>Terrapene carolina</i> ssp. <i>carolina</i> | Emydidae, Emydinae | A |
| 3249b | 31000d | Star Tortoise, <i>Geochelone elegans</i> | Testudinidae | A |
| 3249c | 31000d | Razorback Musk Turtle, <i>Sternotherus carinatus</i> | Kinosternidae | A |
| 3249d | 31000d | Common Snapping Turtle, <i>Chelydra serpentina</i> | Chelydridae | A |
| 3268 | SS 124000d | Charles Island Giant Tortoise, <i>Chelonoidis nigra</i> | Testudinidae | A |
| Margin | | LR: Leatherback Sea Turtle, <i>Dermochelys coriacea</i> | Dermochelyidae | Z |

SERBIA**2019 February 5** (Year of the Pig) (Set/2)

| | | | | |
|-----|-----|--------------------------------|--|-----|
| 844 | 23d | Stylized Snake (Zodiac symbol) | | S C |
| 845 | 74d | Stylized Snake (Zodiac symbol) | | S C |

SIERRA LEONE**2018 January 30** (Turtles) (MS/4 & SS/1)

| | | | | |
|-------|------------|---|------------------|---|
| 4624a | 9800le | Mary River Turtle, <i>Elusor macrurus</i> | Chelidae | A |
| 4624b | 9800le | Pig-nosed Turtle, <i>Carettochelys insculpta</i> | Carettochelyidae | A |
| 4624c | 9800le | McCord's Snakeneck Turtle, <i>Chelodina mccordi</i> | Chelidae | A |
| 4624d | 9800le | African Mud Turtle, <i>Pelusios castaneus</i> | Pelomedusidae | A |
| 4644 | SS 40000le | Galápagos Tortoise, <i>Geochelone nigra</i> | Testudinidae | A |
| | Margin | R: Same species | Testudinidae | Z |

2018 February 27 (Stamps-on-Stamps) (MS/4)

| | | | | |
|-------|--------|--|--------------|---|
| 4671c | 9800le | Geometric Tortoise, <i>Psammobates geometricus</i> (South Africa Sc#1022) | Testudinidae | A |
|-------|--------|--|--------------|---|

2018 April 27 (Endangered Species) (MS/4)

| | | | | |
|-------|--------|---|-------------|---|
| 4750b | 9800le | Hawksbill Sea Turtle, <i>Eretmochelys imbricata</i> | Cheloniidae | A |
|-------|--------|---|-------------|---|

SINGAPORE**2018 October 17** (Nursery Rhymes) (Set/8)

| | | | | |
|------|-----|------------------------------------|--|-----|
| 1931 | 70c | Stylized Frog ("Jump, Frog, Jump") | | S A |
|------|-----|------------------------------------|--|-----|

SURINAM**2018 June 20** (Frogs) (Block/4)

| | | | | |
|-------|---------|---|--------------------------|---|
| 1539a | (50c) | Limon Giant Glass Frog, <i>Sachatamia ilex</i> (inscr. "A") (Cap/Syn: <i>Centrolene ilex</i>) | Centrolenidae | A |
| 1539b | \$15.50 | no common name, <i>Centrolene peristictum</i> | Centrolenidae | A |
| 1539c | \$19 | no common name, <i>Phyllomedusa</i> sp. | Hylidae, Phyllomedusinae | A |
| 1539d | \$20 | no common name, <i>Platypelis grandis</i> | Microhylidae | A |

2018 December 29 (Flora & Fauna) (12ea SS/1)

| | | | | |
|------|-----|---|------------------------|---|
| 1549 | \$5 | Green Bright-eyed Frog, <i>Boophis viridis</i> | Mantellidae, Boophinae | A |
| 1555 | \$5 | White-lipped Tree Frog, <i>Litoria infrafrenata</i> | Hylidae, Hylinae | A |

TIMOR**2010 November 28** (Reptiles & Amphibians) (Set/6 & SS/6)

| | | | | |
|------|-----|--|--------------------------------|---|
| 364 | 50c | Timor River Frog, <i>Limnonectes timorensis</i> | Dicroglossidae, Dicroglossinae | A |
| 365 | 50c | Timor Snake-necked Turtle, <i>Chelodina timorensis</i> | Chelidae | A |
| 366 | 75c | White-lipped Pit Viper, <i>Trimeresurus albolabris</i> (♀) | Viperidae, Crotalinae | A |
| 367 | 75c | Spotted Tree Monitor, <i>Varanus timorensis</i> | Varanidae, Platynota | A |
| 368 | \$1 | Saltwater Crocodile, <i>Crocodylus porosus</i> | Crocodylidae | A |
| 369 | \$1 | Lesser Sundas Bronzeback, <i>Dendrelaphis inornatus</i> | Colubridae, Colubrinae | A |
| 369a | | SS/6 (Sc#364–69) | | |

2016 October 31 (Arrival of Portuguese in Timor) (Set/2)

| | | | | |
|-----|--------|-----------------------------------|--|-----|
| 371 | \$1 | Stylized Lizard silhouette (logo) | | S C |
| 372 | \$1.50 | Stylized Lizard silhouette (logo) | | S C |

TONGA**2019 February 8** (Animals of the World) (Horiz Pair)

| | | | | |
|-------|-----|--|----------------|---|
| 1340b | 5pa | Big-eyed Tree Frog, <i>Leptopelis vermiculatus</i> | Arthroleptidae | A |
|-------|-----|--|----------------|---|

TONGA (Niufo'ou)**2018 December 10** (Animals of the World) (2ea Horiz Pair)

| | | | | |
|------|--------|---|-----------------------|---|
| 376b | 2.80pa | Veiled Chameleon, <i>Chamaeleo calyptratus</i> | Chamaeleonidae | A |
| 377b | 4.30pa | Rowley's Palm Pit Viper, <i>Bothriechis rowleyi</i> | Viperidae, Crotalinae | A |

TURKISH REP. OF NORTHERN CYPRUS **2018 July 31** (Reptiles) (Set/2 & SS/4)

| | | | | |
|------|-------|--|-------------|---|
| 821 | 1.50l | Western Caspian Turtle, <i>Mauremys rivulata</i> | Geoemydidae | A |
| 822 | 1.65l | no common name, <i>Phoenicolacerta troodica</i> | Lacertidae | A |
| 822a | | SS/4 (2ea Sc#821–22) | | |

| | | | | |
|------------------------------------|--------|--|--------------------|-----|
| UKRAINE | | 2018 November 9 (Ukrainian Alphabet) (MS/11) | | |
| 1180k | 7h | Stylized Toad | | S A |
| UNITED NATIONS | | 2019 April 26 (Endangered Species) (Block/4) | | |
| 1212 | \$1.15 | Hawksbill Sea Turtle, <i>Eretmochelys imbricata</i> | Cheloniidae | A |
| 1215a | | Block/4 (Sc#1212–15) | | |
| UNITED NATIONS (Vienna) | | 2019 April 26 (Endangered Species) (Block/4) | | |
| 635 | 90c | Leatherback Sea Turtle, <i>Dermochelys coriacea</i> | Dermochelyidae | A |
| 637a | | Block/4 (Sc#634–37) | | |
| UNITED STATES | | 2019 July 9 (Frogs) (Block/4 & Bklt/20) | | |
| 5395 | 55c | Pacific Tree Frog, <i>Pseudacris regilla</i> | Hylidae, Hyliinae | A |
| 5396 | 55c | Northern Leopard Frog, <i>Rana pipiens</i> | Ranidae | A |
| 5397 | 55c | Green Tree Frog, <i>Hyla cinerea</i> | Hemiphractidae | A |
| 5398 | 55c | Squirrel Tree Frog, <i>Hyla squirella</i> | Hemiphractidae | A |
| 5398a | | Block/4 (Sc#5395–98) | | |
| 5398b | | Bklt/20 (5ea Sc#5395–98) | | |
| UZBEKISTAN | | 2018 November 28 (Fauna) (Set/4 & SS/1) | | |
| 865 | 1100s | Lichtenstein's Toadhead Agama, <i>Phrynocephalus interscapularis</i> | Agamidae, Agaminae | A |
| VIET NAM | | 2018 August 18 (Fauna of Kno Ka Kinh N.P.) (Set/4 & SS/4) | | |
| 3609 | 3000d | no common name, <i>Acanthosaura nataliae</i> | Agamidae | A |
| 3611a | | SS/4 (Sc#3608–11) | | |
| WALLIS & FUTUNA ISLANDS | | 2018 November 8 (Mangrove Conservation) (Horiz Strip/4) | | |
| 805b | 115fr | U/I reptile (on mangrove root) | | U C |

MONTENEGRO ROCK LIZARD

On 12 April 2019, Montenegro issued a single commemorative stamp depicting a Prokletije Rock Lizard (*Dinarolacerta montenegrina*). This lizard is a member of the Lacertidae family and is found only in Montenegro and Albania. It was first described in 2007. It is included on the International Union for Conservation of Nature (IUCN) Red List as threatened, but as “Least Concerned” due to reduction of habitat.

The lizard lives in rocky areas including debris fields and rock outcroppings at elevations up to 1,700 meters in the Prokletije mountain range.

The stamp was designed by Zoran Popović and printed by FORUM – Novi Sad using offset lithography in a quantity of 50,000. It measures 42×28 mm and is perforated 13¼.



Dinarolacerta montenegrina
Montenegro, 2019, Mi#6334

MARINE INVERTEBRATES

Editor

Ian Hunter, BU1619

New Listings



| Scott# | Denom | Common Name/Scientific Name | Family/Subfamily | Code |
|---|-----------|---|---|-------------|
| ANGOLA 2019 May 15 (Climate Change) (Set/4 & SS/1) | | | | |
| 1622 | 300k | U/I Corals (in acidified ocean) | | U A |
| 1699 | SS Margin | LL: U/I Coral stalk | | U Z |
| 2019 May 15 (Seashells) (Set/4 & SS/1) | | | | |
| 1628 | 300k | a Snail, <i>Cyclostoma purum</i> | Epitoniidae | A |
| 1629 | 300k | a Snail, <i>Tegula gallina</i> | Tegulidae | A |
| 1630 | 300k | 1: Chinese Hat Snail, <i>Calyptreaea spirala</i> 2: Land Snail, <i>Labyrinthus plicatus</i> | Calyptreaeidae Pleurodontidae | B B |
| 1631 | 300k | 1: a Snail, <i>Hindsia nivea</i> 2: a Snail, <i>Micrarionta kelletii</i> | Nassariidae Buccinidae | B B |
| 1701 | SS 1200k | UR: Land Snail, <i>Succinea putris</i> Ctr: Kellet's Whelk, <i>Fusus</i> (= <i>Kelletia</i>) <i>kelletii</i> LL: a Land Snail, <i>Labyrinthus leucodon</i> | Succineidae Buccinidae Pleurodontidae | B B B |
| | Margin | LL: a Snail, <i>Cyclostoma purum</i> MR: Land Snail, <i>Sultana kelletii</i> Bot: Cooper's Nutmeg, <i>Cancellaria cooperii</i> | Epitoniidae Orthalicidae Cancellariidae | Z Z Z |
| ARGENTINA 2018 September 10 (Map of Argentine Continental Shelf) (SS/1) | | | | |
| 2838 | SS Margin | L: Stylized small lobsters, crabs, bivalves, gastropods | | S Z |
| AUSTRALIA 2019 July 2 (Crayfish) (Set/3) | | | | |
| 4982 | \$1 | Freshwater Crayfish, <i>Cherax cainii</i> | Parastacidae | A |
| 4983 | \$1 | Tasmanian Giant Freshwater Crayfish, <i>Astacopsis gouldi</i> | Parastacidae | A |
| 4984 | \$1 | Lamington Crayfish, <i>Euastacus sulcatus</i> | Parastacidae | A |
| BELARUS 2019 April 17 (Marine Life) (SS/4) | | | | |
| 1136 | (1.50r) | Danube Crayfish, <i>Astacus leptodactylus</i> | Astacidae | A |
| 1137 | (1.82r) | Lister's River Snail, <i>Viviparus contectus</i> | Viviparidae | A |
| 1137a | | SS/4 (Sc#1134–37) | | |
| BELGIUM 2019 June 17 (Star-shaped Items in Nature) (MS/5+4 labels) | | | | |
| 2896b | €1.40 | U/I Starfish | | U A |
| COCOS ISLANDS 2019 May 28 (Water Sports) (Set/4 & SS/4) | | | | |
| 405 | \$2 | U/I Coral (w/ snorkeler) | | U B |
| 406a | | SS/4 (Sc#403–06) | | |
| CROATIA 2019 May 15 (Marine Life) (MS/4) (s/a) | | | | |
| C6a | 8.60k | Spiral Fan Worm, <i>Bispira volutacornis</i> | Sabellidae | A |
| C6b | 8.60k | Purple Sea Urchin, <i>Sphaerechinus granularis</i> | Toxopneustidae | A |
| C6c | 8.60k | Dotted Sea Slug, <i>Peltodoris atromaculata</i> | Discodorididae | A |
| FRENCH POLYNESIA 2019 May 24 (Marine Life in Protected Areas) (Single) | | | | |
| 1227 | 100fr | U/I Corals (w/ fish) | | U B |

| | | | | |
|------------------------------------|------------|---|--------------------|-----|
| HUNGARY | | 2019 April 5 (Captain Nemo Characters) (MS/4) | | |
| 4607b | 120fo | Stylized marine life (w/ divers & shipwreck) | | S C |
| 4507d | 120+75fo | Stylized Octopus & Jellyfish | | S C |
| 4507 | Margin | Bkgrd: Stylized Jellyfish & Crabs | | S Z |
| PITCAIRN ISLANDS | | 2018 September 19 (Big Blue Octopus) (SS/3) | | |
| 848a | \$1 | Big Blue Octopus, <i>Octopus cyanea</i> | Octopodidae | A |
| 848b | \$2.80 | Same species | Octopodidae | A |
| 848c | \$3 | Same species | Octopodidae | A |
| 848 | Margin | Top: Big Blue Octopus, <i>Octopus cyanea</i> | Octopodidae | Z |
| SIERRA LEONE | | 2018 January 30 (Mushrooms) (MS/4 & SS/1) | | |
| 4625d | 9800le | Edible Snail, <i>Helix pomatia</i> | Helicidae | B |
| 4645 | SS Margin | UR & LR: Edible Snail, <i>Helix pomatia</i> | Helicidae | Z |
| | | 2018 March 30 (Shells) (MS/4 & SS/1) | | |
| 4719a | 9800le | Spike-topped Apple Snail, <i>Pomacea bridgesii</i> | Ampullariidae | A |
| 4719b | 9800le | Liguus Tree Snail, <i>Liguus fasciatus</i> | Orthalicidae | A |
| 4719c | 9800le | Emerald Green Snail, <i>Papustyla pulcherrima</i> | Camaenidae | A |
| 4719d | 9800le | Costate Mountain Snail, <i>Oreohelix idahoensis</i> | Oreohelicidae | A |
| 4738 | SS 40000le | Cuvier Tropic Snail, <i>Tropidophora cuveriana</i> | Pomatiidae | A |
| | Margin | Ctr: Horn Snail, <i>Telescopium telescopium</i> | Potamididae | Z |
| | | MR: <i>Aspastus miltocheilus</i> ssp. <i>manugiensis</i> | Bothriembryontidae | Z |
| | | LR: King Helmet, <i>Cassiss tuberosa</i> | Cassidae | Z |
| | | Bot: Land Snail, <i>Helicostyla marinduquensis</i> | Bradybaenidae | Z |
| THAILAND | | 2018 October 9 (World Post Day) (Single) | | |
| 3032 | 3b | Stylized tiny Shrimp | | S C |
| TRISTAN DA CUNHA | | 2019 April 10 (Lobster Fisheries) (Set/4) | | |
| 1153 | 35p | Lobster boats | | R |
| 1154 | 50p | Stylized Lobster (package label) (w/ packing factory) | | S B |
| 1155 | £1 | Small Lobster boat & factory freezer vessel | | R |
| 1156 | £2 | Tristan Lobster, <i>Jasus paulensis</i> (Cap: <i>Jasus tristani</i>) | Palinuridae | A |
| UNITED NATIONS | | 2019 April 26 (Endangered Species) (Block/4) | | |
| 1213 | \$1.15 | Queen Conch, <i>Strombus gigas</i> | Strombidae | A |
| 1214 | \$1.15 | Mushroom Coral, <i>Fungia scutaria</i> | Fungiidae | A |
| UNITED NATIONS (Geneva) | | 2019 April 26 (Endangered Species) (Block/4) | | |
| 665 | 1.50fr | Smooth Cauliflower Coral, <i>Stylophora pistillata</i> | Pocilloporidae | A |
| UNITED NATIONS (Vienna) | | 2019 April 26 (Endangered Species) (Block/4) | | |
| 636 | 90c | Staghorn Coral, <i>Acropora</i> sp. | Acroporidae | U A |
| WALLIS & FUTUNA ISLANDS | | 2017 September 22 (Rays) (MS/4) | | |
| 790 | Margin | Bot: U/I Starfish & Corals | | U Z |
| | | 2017 November 9 (Global Warming) (Horiz Strip/4) | | |
| 792b | 115fr | Coral whitening (Cyclone Evan of 2012) | | U B |
| | | 2018 November 8 (Mangrove Conservation) (Horiz Strip/4) | | |
| 805b | 115fr | U/I Crab (w/ mangrove roots) | | U B |



ICHTHYOLOGY

Editor

J. Dale Shively, BU1832

New Listings



| Scott# | Denom | Common Name/Scientific Name | Family/Subfamily | Code |
|---|---------|---|------------------------------|----------|
| AUSTRALIA | | | | |
| 2019 March 14 (Sustainable Fish) (SS/3 & Bklt/10) | | | | |
| 4948 | SS \$1 | Patagonian Toothfish, <i>Dissostichus eleginoides</i> (w/ fishing boat) | Nototheniidae | A |
| 4949 | SS \$1 | Blue Grenadier, <i>Macruronus novaezelandiae</i> (w/ fishing boat) | Merlucciidae | A |
| 4950 | SS \$1 | Tiger Flathead, <i>Platycephalus richardsoni</i> (w/ fishing boat) | Platycephalidae | A |
| 4950a | | SS/3 (Sc#4948–50) (perf 14¼) | | |
| 4951 | \$1 | Patagonian Toothfish, <i>Dissostichus eleginoides</i> (w/ fishing boat) | Nototheniidae | A |
| 4952 | \$1 | Blue Grenadier, <i>Macruronus novaezelandiae</i> (w/ fishing boat) | Merlucciidae | A |
| 4953 | \$1 | Tiger Flathead, <i>Platycephalus richardsoni</i> (w/ fishing boat) | Platycephalidae | A |
| 4953a | | Bklt/10 (4ea Sc#4951 & 3ea Sc#4952–53) (die cut 1 1¼) (s/a) | | |
| BELARUS | | | | |
| 2019 April 17 (Marine Life) (SS/4) | | | | |
| 1135 | (1.26r) | Three-spined Stickleback, <i>Gasterosteus aculeatus</i> ♀ & ♂ | Gasterosteidae | A |
| 1137a | | SS/4 (Sc#1134–37) | | |
| BOSNIA & HERZEGOVINA (Croat) | | | | |
| 2018 November 1 (Fish) (Block/4) | | | | |
| 384a | 2.70m | Adriatic Trout, <i>Salmothymus oxyrhynchus (obtusirostris)</i> | Salmonidae | A |
| 384b | 2.70m | no common name, <i>Phoxinellus pseudalepidotus</i> | Cyprinidae | A |
| 384c | 2.70m | Spined Loach, <i>Cobitis herzegoviensis (vardarensis?)</i> | Cobitidae | A |
| 384d | 2.70m | Dalmatian Barbelgudgeon, <i>Aulopyge huegelii</i> | Cyprinidae | A |
| BRITISH INDIAN OCEAN TERR. | | | | |
| 2017 June 8 (Fish) (Set/6) | | | | |
| 474 | 60p | Atlantic Sailfish, <i>Istiophorus albicans</i> R: School of U/I fish | Istiophoridae | A U B |
| 475 | £1 | Reef Manta Ray, <i>Mobula alfredi</i> | Myliobatidae | A |
| 476 | £1.50 | Oceanic Whitetip Shark, <i>Carcharhinus longimanus</i> R: Pilotfish, <i>Naucrates doctor</i> | Carcharhinidae Carangidae | A B |
| 477 | £1.50 | Blue Marlin, <i>Makaira nigricans</i> | Istiophoridae | A |
| 478 | £2 | Ocean Sunfish, <i>Mola mola</i> | Molidae | A |
| 479 | £3 | Whale Shark, <i>Rhincodon typus</i> Bot: School of U/I fish | Rhincodontidae | A U B |
| 2017 September 5 (Corals) (MS/6) | | | | |
| 480 | Margin | Bkgrd: U/I reef fish | | U Z |
| 2018 September 4 (Intl. Year of the Reef Children's Art) (Set/4) | | | | |
| 493 | £2 | Stylized marine fish (child's drawing: Kyle Irvine–age 6) | | S B |
| 494 | £2 | Stylized marine fish (child's drawing: Megan Lee Yit May–age 9) | | S B |
| 465 | £2 | Stylized marine fish (child's drawing: Laura Gilbert–age 12) | | S B |
| 493 | £2 | Stylized marine fish (child's drawing: Ailis Law–age 14) | | S B |
| CHINA (People's Republic) | | | | |
| 2018 August 7 (Solar Terms) (Block/6) | | | | |
| 4569a | \$1.20 | Stylized fish on dinner plate | | S C |
| 2018 August 26 (Yangtze River Economic Belt) (Set/6 & SS/6) | | | | |
| 4576 | \$1.50 | LR: Chinese Sturgeon, <i>Acipenser sinensis</i> | Acipenseridae | S B |
| 4576a | | SS/6 (Sc#4571–76) | | |

| | | | | |
|---|-----------|--|----------------|----------|
| CHINA (People's Republic) (cont) | | 2018 September 8 (Book of Songs) (MS/6) | | |
| 4577e | \$1.50 | Minor songs of Kingdom w/ six small U/I fish | | U C |
| COCOS ISLANDS | | 2019 May 29 (Water Sports) (Set/4 & SS/4) | | |
| 405 | \$2 | Common Bluestripe Snapper, <i>Lutjanus kasmira</i> (w/ divers) | Lutjanidae | B |
| 406a | | SS/4 (Sc#403-06) | | |
| DJIBOUTI | | 2018 December 13 (Fishes) (MS/4 & SS/1) | | |
| 1591a | 240fr | Yellowfin Surgeonfish, <i>Acanthurus xanthopterus</i> | Acanthuridae | A |
| 1591b | 240fr | Yellowtail Tang, <i>Zebrasoma xanthurum</i> Bkgrd: School of U/I tiny fish | Acanthuridae | A U C |
| 1591c | 240fr | Orange-spotted Trevally, <i>Carangoides bajad</i> Bkgrd: School of U/I tiny fish | Carangidae | A U C |
| 1591d | 240fr | Whitebar Surgeonfish, <i>Acanthurus leucopareius</i> Bkgrd: School of U/I tiny fish | Acanthuridae | A U C |
| 1610 | SS 950fr | Orange-lined Triggerfish, <i>Balistapus undulatus</i> | Balistidae | A |
| | Margin | MR: Yellowtail Tang, <i>Zebrasoma xanthurum</i> | Acanthuridae | Z |
| | | Bot: Yellowfin Surgeonfish, <i>Acanthurus xanthopterus</i> | Acanthuridae | Z |
| | | Bkgrd: School of U/I tiny fish | | U C Z |
| | | 2019 March 14 (Sharks) (MS/4 & SS/1) | | |
| 1677a | 250fr | Scalloped Hammerhead, <i>Sphyrna lewini</i> | Sphyrnidae | A |
| 1677b | 250fr | Whitetip Reef Shark, <i>Triaenodon obesus</i> | Carcharhinidae | A |
| 1677c | 250fr | Blue Shark, <i>Prionace glauca</i> | Carcharhinidae | A |
| 1677d | 250fr | Whale Shark, <i>Rhincodon typus</i> | Rhincodontidae | A |
| 1685 | SS 1000fr | Great White Shark, <i>Carcharodon carcharias</i> | Lamnidae | A |
| | Margin | LL & Bot: Blacktip Reef Shark, <i>Carcharhinus melanopterus</i> | Carcharhinidae | Z |
| | | MR: Great Hammerhead Shark, <i>Sphyrna mokarran</i> | Sphyrnidae | Z |
| | | MR Bkgrd: Moorish Idol, <i>Zanclus cornutus</i> | Zanclidae | C Z |
| | | Bkgrd: U/I reef fish | | U Z |
| | | 2019 March 14 (Kingfishers) (SS/1) | | |
| 1686 | SS 1000fr | Bot: U/I fish (in kingfishers' beaks) | | U Z |
| GRENADA | | 2019 January 11 (Spice Island Billfish Tournament) (MS/6) | | |
| 4318a | \$2 | Yellowfin Tuna, <i>Thunnus albacares</i> | Scombridae | A |
| 4318e | \$6 | Atlantic Sailfish, <i>Istiophorus albicans</i> | Istiophoridae | B |
| 4318f | \$7 | Blue Marlin, <i>Makaira nigricans</i> | Istiophoridae | A |
| 4318a-f | | Stylized Blue Marlin (two logos on each stamp) | Istiophoridae | S C |
| 4318 | Margin | Bot: Blue Marlin, <i>Makaira nigricans</i> | Istiophoridae | Z |
| | | Ctr: Stylized Blue Marlin (logo) | Istiophoridae | S Z |
| | | 2019 February 6 (Ocean Sunfish) (SS/3) | | |
| 4319a | \$4.50 | Ocean Sunfish, <i>Mola mola</i> | Molidae | A |
| 4319b | \$5.50 | Same species | Molidae | A |
| 4319c | \$6.50 | Same species | Molidae | A |
| 4319 | | Bkgrd: U/I reef fish | | U Z |
| GRENADA GRENADINES | | 2019 February 18 (Sea Turtles) (MS/4 & SS/1) | | |
| 3017 | Margin | Bkgrd: Sergeant-major, <i>Abudefduf saxatilis</i> | Pomacentridae | Z |
| | | LL: Indian Ocean Oriental Sweetlips, <i>Plectorhinchus vittatus</i> | Haemulidae | Z |
| | | MR: Regal Angelfish, <i>Pygoplites diacanthus</i> | Pomacentridae | Z |
| 3018 | SS Margin | Bkgrd: Sergeant-major, <i>Abudefduf saxatilis</i> | Pomacentridae | Z |
| | | Bot: Indian Ocean Oriental Sweetlips, <i>Plectorhinchus vittatus</i> | Haemulidae | Z |
| | | LL: Blacktip Reef Shark, <i>Carcharhinus melanopterus</i> | Carcharhinidae | Z |

| | | | | |
|----------------------------------|----------|--|----------------|-----|
| GRENADA GRENADINES (cont) | | 2019 March 4 (Sharks) (MS/4 & 2ea SS/1) | | |
| 3020a | \$4 | Remora, <i>Remora remora</i> | Echeneidae | A |
| 3020b | \$5 | Whitetip Reef Shark, <i>Triaenodon obesus</i> | Carcharhinidae | A |
| 3020c | \$6 | Scalloped Hammerhead, <i>Sphyrna lewini</i> | Sphyrnidae | A |
| | | Creole-fish, <i>Paranthias furcifer</i> | Serranidae | B |
| 3020d | \$7 | Lemon Shark, <i>Negaprion brevirostris</i> | Carcharhinidae | A |
| | | Remora, <i>Remora remora</i> | Echeneidae | B |
| 3020 | Margin | ML: U/I sharks | | U Z |
| 3021 | SS \$14 | Tiger Shark, <i>Galeocerdo cuvier</i> | Carcharhinidae | A |
| 3022 | SS \$15 | Bull Shark, <i>Carcharhinus leucas</i> | Carcharhinidae | A |
| | Margin | Bkgrd: Remora, <i>Remora remora</i> | Echeneidae | Z |
| | | Bkgrd: Scissortail Sergeant, <i>Abudefduf sexfasciatus</i> | Pomacentridae | Z |
| HUNGARY | | 2019 April 5 (Captain Nemo Characters) (MS/4) | | |
| 4507a | 120fo | Stylized fish (w/ <i>The Nautilus</i>) | | S C |
| 4507b | 120fo | Stylized fish (w/ divers & shipwreck) | | S C |
| 4507c | 120+75fo | Stylized fish (w/ ship) | | S C |
| 4507d | 120+75fo | Stylized fish (w/ octopus) | | S C |
| 4507 | Margin | Bkgrd: Stylized fish | | S Z |
| ISRAEL | | 2019 July 16 (Ketubah; Marriage Agreement) (SS/1 w/ foil) | | |
| 2230 | SS 10s | Frame corners: Stylized pair of fish | | S Z |
| MACEDONIA | | 2018 November 21 (Fish) (MS/4) | | |
| 797a | 11d | no common name, <i>Squalius vardarensis</i> | Cyprinidae | A |
| 797b | 20d | no common name, <i>Alburnus macedonicus</i> | Cyprinidae | A |
| 797c | 50d | European Eel, <i>Anguilla anguilla</i> | Anguillidae | A |
| 797d | 100d | Ohrid Trout, <i>Salmo letnica</i> | Salmonidae | A |
| 797 | Margin | Bkgrd: <i>Alburnus macedonicus</i> | Cyprinidae | Z |
| SIERRA LEONE | | 2018 April 27 (Kingfishers) (MS/4 & SS/1) | | |
| 4748b | 9800le | U/I fish (in beak of <i>Todiramphus macleayii</i>) | | U C |
| 4748c | 9800le | U/I fish (in beak of <i>Ceryle rudis</i>) | | U C |
| 4767 | 40000le | U/I fish (in beak of <i>Dacelo novaeguineae</i>) | | U C |
| | Margin | Bot: Fathead Minnow (?), <i>Pimephales promelas</i> (in bird's beak) | Cyprinidae | C Z |



ENTOMOLOGY

Editor

Donald P. Wright, Jr., BU243
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New Listings

| Scott# | Denom | Common Name/Scientific Name | Family/Subfamily | Code |
|---|---------|---|--------------------|------|
| ANDORRA (French) 2019 October 7 (Butterfly) (Single) | | | | |
| N/A | €1.05 | Cardinal, <i>Argynnis pandora</i> Schiffermüller | NYM, Heliconiinae | A |
| AUSTRALIA 2019 August 1 (Gardening) (Set/5, SS/5, 7ea Bklt/s) | | | | |
| 4994 | \$1 | Rainwater Garden: Blue-banded Bee, <i>Amegilla cingulata</i> Fabr. | API, Apinae | C |
| 4994a | | Bklt/4 (Sc#4994) (perf 14×14¾) | | |
| 4996 | \$1 | Nest Box: Australian Painted Lady, <i>Vanessa kershawi</i> McCoy | NYM, Nymphalinae | B |
| 4996a | | Bklt/4 (Sc#4996) (perf 14×14¾) | | |
| 4997 | \$1 | Pollinators: Western Honeybee, <i>Apis mellifera</i> L. | API, Apinae | C |
| | | Australian Painted Lady, <i>Vanessa kershawi</i> McCoy | NYM, Nymphalinae | B |
| | | U/I Native Bees | Hymenoptera | U C |
| 4997a | | Bklt/4 (Sc#4997) (perf 14½×14) (50×30mm) | | |
| 4998 | \$2 | Vegetable Garden: U/I Bees | Apidae | U C |
| | | Common Spotted Ladybird, <i>Harmonia conformis</i> Boisduval | COC, Epilachninae | C |
| | | Fungus-eating Ladybird, <i>Illeis galbula</i> Mulsant | COC, Coccinellinae | C |
| 4998a | | Bklt/2 (Sc#4998) (perf 14½×14) (50×30mm) | | |
| 4998b | | SS/5 (Sc#4994–98) | | |
| 4999 | \$1 | Rainwater Garden: Blue-banded Bee, <i>Amegilla cingulata</i> Fabr. | API, Apinae | C |
| 5001 | \$1 | Nest Box: Australian Painted Lady, <i>Vanessa kershawi</i> McCoy | NYM, Nymphalinae | B |
| 5001a | | Bklt/20 (6ea Sc#4999, Sc#5001, & 7ea Sc#5000) (die cut 11¼) (s/a) (38×26mm) | | |
| 5002 | \$1 | Pollinators: Western Honeybee, <i>Apis mellifera</i> L. | API, Apinae | C |
| | | Australian Painted Lady, <i>Vanessa kershawi</i> McCoy | NYM, Nymphalinae | B |
| | | U/I Native Bees | Hymenoptera | U C |
| 5002a | | Bklt/10 (Sc#5002) (die cut 10¾) (s/a) (50×30mm) | | |
| BRAZIL 2019 September 23 (Brazilian Fauna) (Strip/3) | | | | |
| Brazilian Glowing Beetle Larvae. Brazil issued this stamp showing the luminescent larvae of the click beetle <i>Pyrearinus termitilluminans</i> on a mound of the termite <i>Cornitermes cumulans</i> . This beetle lays its eggs in cavities in the termite mound. Upon emerging from the eggs, the larvae have luminescent abdomens similar to that of fireflies. This glow attracts termites as well as other small insects and the beetle larvae catch and eat those attracted. A search on the internet using the beetle's name will reveal several very interesting videos of studies of the beetle larvae at night. | | | | |
| N/A | 2-porte | <i>Pyrearinus termitilluminans</i> Costa | ELA, Agrypninae | C |
| | | <i>Cornitermes cumulans</i> Kollar (termite mound–no insect) | TER, Syntermitinae | B |
| CARIBBEAN NETHERLANDS (St. Eustatius) 2019 October 4 (Butterflies) (Sheet/20) | | | | |
| a | 150c | Monarch, <i>Danaus plexippus</i> L. | NYM, Danainae | A |
| b | 150c | Acis Hairstreak, <i>Strymon acis</i> Drury | LYC, Theclinae | A |
| c | 150c | Caribbean Duskywing, <i>Ephyriades arcas</i> Drury | HES, Pyrginae | A |
| d | 150c | Miami Blue, <i>Cyclargus thomasi</i> Clench | LYC, Polyommatae | A |
| e | 150c | Ruddy Daggerwing, <i>Marpesia petreus</i> Cramer | NYM, Cyrestinae | A |
| f | 150c | Great Southern White, <i>Ascia monuste</i> L. | PIE, Pierinae | A |
| g | 150c | Tropical Checkered White, <i>Pyrgus oileus</i> L. | HES, Pyrginae | A |

CARIBBEAN NETHERLANDS (St. Eustatius) (continued)

| | | | | |
|---|------|---|-------------------|---|
| h | 150c | Red Rim, <i>Biblis hyperia</i> Cramer | NYM, Biblidinae | A |
| i | 150c | False Barred White, <i>Eurema elathea</i> Cramer | PIE, Coliadinae | A |
| j | 150c | Long-tailed Skipper, <i>Urbanus proteus</i> L. | HES, Pyrginae | A |
| k | 150c | Gulf Fritillary, <i>Agraulis vanillae</i> L. | NYM, Heliconiinae | A |
| l | 150c | Cassius Blue, <i>Leptotes cassius</i> Cramer | LYC, Theclinae | A |
| m | 150c | Common Buckeye, <i>Junonia coenia</i> Hübner | NYM, Nymphalinae | A |
| n | 150c | Fiery Broken Dash, <i>Wallengrenia otho</i> ssp. <i>ophites</i> Mabille | HES, Hesperinae | A |
| o | 150c | Cloudless Sulfur, <i>Phoebis sennae</i> L. | PIE, Coliadinae | A |
| p | 150c | Zebra Heliconian, <i>Heliconius charithonia</i> L. | NYM, Heliconiinae | A |
| q | 150c | Hanno Blue, <i>Hemiargus hanno</i> Stoll | LYC, Polyommatae | A |
| r | 150c | Little Yellow, <i>Eurema lisa</i> Boisduval & LeConte | PIE, Coliadinae | A |
| s | 150c | Painted Lady, <i>Vanessa cardui</i> L. | NYM, Nymphalinae | A |
| t | 150c | Manuel's Skipper, <i>Polygonus savigny</i> Latreille (Cap: <i>manueli</i>) | HES, Pyrginae | A |

GREAT BRITAIN **2019 October 10 (The Gruffalo) (SS/4)**

| | | | | |
|---|-------|--|-------------|-------|
| d | (70p) | Stylized blue butterfly (also in Top margin) | Lepidoptera | S C Z |
| | | Stylized insect | Insecta | S C |

IRAQ **2019 May 21 (International Flower Festival) (Set/3)**

| | | | | |
|------|-------|---|--------------------|-----|
| 2060 | 250d | LL: Monarch, <i>Danaus chrysippus</i> L. | NYM, Danainae | B |
| | | UR: Eastern Tiger Swallowtail, <i>Papilio glaucus</i> L. | PAP, Papilioninae | B |
| 2061 | 1000d | L: Painted Lady, <i>Vanessa cardui</i> L. | NYM, Nymphalinae | B |
| | | LR: Old World Swallowtail, <i>Papilio machaon</i> L. | PAP, Papilioninae | B |
| 2062 | 1500d | UL: Monarch, <i>Danaus plexippus</i> L. | NYM, Danainae | B |
| | | LR: Red-spotted Purple, <i>Limnitis arthemis</i> ssp. <i>astyanax</i> Fabr. | NYM, Limenitidinae | B |
| | | UR: U/I Ladybird Beetle | Coccinellidae | U C |

ISRAEL **2018 April 9 (Spring Flowers) (new data)**

Thanks to Patrice Bonafonte for this identification.

| | | | | |
|-------|-------|--|-------------|---|
| 2180a | 4.10s | Rittner's Bumblebee Scarab, <i>Eulasia rittneri</i> Uliana & Sabatinelli ♀ | Glaphyridae | B |
| 2180b | (20s) | SS/4 (Sc#2177a-80a) | | |

KYRGYZSTAN **2019 October 28 (Beekeeping) (SS/3)**

| | | | | |
|--------|------|--|-------------|---|
| a | 50s | Western Honeybee, <i>Apis mellifera</i> L. | API, Apinae | B |
| b | 100s | Same species | API, Apinae | B |
| c | 150s | Same species | API, Apinae | B |
| Margin | | Top: Bee hives (no insect) | | Z |

MARSHALL ISLANDS **2018 September 8 (Lunar New Year Animals) (MS/12)**

Each stamp has stylized images of a swallowtail butterfly in each corner of the design.

| | | | | |
|------|------------|----------------------------------|-------------------|-----|
| 1212 | 10c-\$1.20 | Stylized swallowtail butterflies | PAP, Papilioninae | S B |
|------|------------|----------------------------------|-------------------|-----|

MONGOLIA **2019 June 30 (95th anniv. Mongolian Postage) (Surcharges) (Set/3)**

| | | | | |
|------|-------|---|----------------|---|
| 2910 | 100t | Purple Tiger Moth, <i>Rhyparia purpurata</i> L. (Sc#1904 surch) | ARC, Arctiinae | A |
| 2911 | 100t | Marbled White, <i>Melanargia galathea</i> L. (Sc#1908 surch) | NYM, Satyrinae | A |
| 2912 | 1300t | Magpie Moth, <i>Abraxas grossulariata</i> L. (Sc#1907 surch) | GEO, Ennominae | A |

MOROCCO **2018 October 1 (Butterflies) (MS/5)**

| | | | | |
|-------|-------|--|---------------------|---|
| 1255a | 3.75d | Dark Green Fritillary, <i>Speyeria aglaja</i> L. | NYM, Heliconiinae | A |
| 1255b | 3.75d | White-lined Sphinx, <i>Hyles lineata</i> L. | SPH, Macroglossinae | A |
| 1255c | 3.75d | Checkered White, <i>Pontia protodice</i> Boisduval & LeConte | PIE, Pierinae | A |
| 1255d | 3.75d | Spanish Festoon, <i>Zerynthia rumina</i> L. | PAP, Parnassiinae | A |
| 1255e | 3.75d | Scarce Swallowtail, <i>Iphiclides podalirius</i> L. | PAP, Papilioninae | A |

NAMIBIA**2018 July 18** (Small Felines of Namibia) (Set/4)

N/A (\$32.10) Black-footed Cat stalking U/I insect (inscr. "Inland Registration") U B

PALAU**2000 January 18** (Futuristic Space Probes) (MS/6 & 4ea SS/1)

This issue honors the Cicada Space Probe project, which was originally sponsored by NASA. The project has held an annual contest since 1994 for school groups to design a space habitat for a long term human colony in space. Prizes are awarded for several age groups from primary school through college. While the set consists of a MS/6 and four SS/1, only one SS shows an insect.

537 SS \$2 17-Year Cicada, *Magicicada septendecim* L. CICA, Cicadettinae B**ST. MARTIN****2019 September 2** (Butterflies) (MS/10)

| | | | | |
|---|------|--|-------------------|---|
| a | 190c | Acis Hairstreak, <i>Strymon acis</i> Drury | LYC, Theclinae | A |
| b | 190c | Gulf Fritillary, <i>Agraulis vanillae</i> L. | NYM, Heliconiinae | A |
| c | 190c | Long-tailed Skipper, <i>Urbanus proteus</i> L. | HES, Pyrginae | A |
| d | 190c | False Barred Sulfur, <i>Eurema elathea</i> Cramer | PIE, Coliadinae | A |
| e | 190c | Cloudless Sulfur, <i>Phoebis sennae</i> L. | PIE, Coliadinae | A |
| f | 190c | Caribbean Duskywing, <i>Ephyriades arcas</i> Drury | HES, Pyrginae | A |
| g | 190c | Miami Blue, <i>Cyclargus thomasi</i> Clench | LYC, Polyommatae | A |
| h | 190c | Great Southern White, <i>Ascia monuste</i> L. | PIE, Pierinae | A |
| i | 190c | Fiery Broken Dash, <i>Wallengrenia otho</i> ssp. <i>ophites</i> Mabile | HES, Hesperinae | A |
| j | 190c | Hammock Skipper, <i>Polygonus leo</i> Gmelin | HES, Pyrginae | A |

SINGAPORE**2019 August 9** (Singapore Parks) (Set/4)N/A 90c White Tiger, *Danaus melanippus* Cramer NYM, Danainae B**SRI LANKA****2019 October 5** (Wagamuwa National Park) (Set/6 & 6ea SS/1)

| | | | | |
|-----|--------|---|-------------------|---|
| N/A | 12r | Five-bar Swordtail, <i>Graphium antiphates</i> Cramer | PAP, Papilioninae | A |
| N/A | SS 12r | Five-bar Swordtail, <i>Graphium antiphates</i> Cramer | PAP, Papilioninae | A |

TAJKISTAN**2019 July** (Mushrooms) (Set/3)

| | | | | |
|-----|-------|--|-------------------|-----|
| N/A | 3.50s | LL: Blue Morpho, <i>Morpho rhetenor</i> Cramer | NYM, Morphinae | B |
| | | UR: Monarch, <i>Danaus plexippus</i> L. | NYM, Danainae | B |
| | | LR: U/I Butterfly <i>Troides</i> sp.? | PAP, Papilioninae | U B |
| N/A | 4.20s | UL: Monarch, <i>Danaus plexippus</i> L. (colored green!) | NYM, Danainae | B |
| | | Top: U/I Butterfly | Nymphalidae | U B |
| N/A | 5.80s | UL & UR: Monarch, <i>Danaus plexippus</i> L. | NYM, Danainae | B |
| | | Top: U/I Damsselfly | Odonata | U B |

UKRAINE**2019 July 27** (Mezyn National Park) (MS/5 + label)e 8h Scarlet Tiger Moth, *Callimorpha dominula* L. ARC, Arctiinae A**Beyond the Catalog**

(Issues of dubious validity)

CENTRAL AFRICAN REPUBLIC **2019 July 24** (Red Cross Anti-malaria) (MS/4 & SS/1) (CA190504a&b)

| | | | | |
|-----|-----------|--|------------------|-----|
| b | 850fr | <i>Anopheles</i> sp. (w/ malaria life cycle) | CUL, Anophelinae | U C |
| c | 850fr | <i>Anopheles</i> sp. (w/ bed nets) | CUL, Anophelinae | U B |
| N/A | SS Margin | LL: <i>Anopheles</i> sp. | CUL, Anophelinae | U Z |

2019 July 24 (Bee-eaters) (MS/4 & SS/1) (CA190506a&b)

| | | | | |
|-----|-----------|--|---------------|-----|
| b | 850fr | U/I Dragonfly (in bird's beak) | Odonata | U C |
| N/A | SS Margin | Bot: European Hornet, <i>Vespa crabro</i> L. | VES, Vespinae | Z |

2019 July 24 (Bee-eaters) (MS/4 & SS/1) (CA190507a&b)

| | | | | |
|---|-------|--|-------------------|---|
| a | 900fr | Tailed Jay, <i>Graphium agamemnon</i> L. | PAP, Papilioninae | A |
| b | 900fr | Tiger Longwing, <i>Heliconius hecale</i> Fabr. | NYM, Heliconiinae | A |
| c | 900fr | Amber Phantom, <i>Haetera piera</i> L. | NYM, Satyrinae | A |

CENTRAL AFRICAN REPUBLIC (continued)

| | | | | |
|-----|-----------|--|--------------------|---|
| d | 900fr | Clipper, <i>Parthenos sylvia</i> Cramer | NYM, Limenitidinae | A |
| N/A | SS 3600fr | Zebra Swallowtail, <i>Protographium marcellus</i> Cramer | PAP, Papilioninae | A |
| | Margin | L: Menelaus Blue Morpho, <i>Morpho menelaus</i> L. | NYM, Morphinae | Z |

2019 September 24 (World Map) (SS/1) (CA190714b1)

| | | | | |
|-----|------------|--|------------|---|
| N/A | SS 13000fr | Printed on SILK from Silkworm, <i>Bombyx mori</i> L. (no insect) | Bombycidae | R |
|-----|------------|--|------------|---|

DJIBOUTI**2019 August 27** (Bees) (MS/4 & SS/1) (DJB190511a&b)

| | | | | |
|-----|-----------|--|------------------|---|
| a | 250fr | Brown Bumblebee, <i>Bombus lapidarius</i> Scopoli | API, Apinae | A |
| b | 250fr | Eastern Carpenter Bee, <i>Xylocopa virginica</i> L. | API, Xylocopinae | A |
| c | 250fr | Asian Honeybee, <i>Apis cerana</i> Enderlein | API, Apinae | A |
| d | 250fr | Buff-tailed Bumblebee, <i>Bombus terrestris</i> L. | API, Apinae | A |
| N/A | SS 1000fr | Western Honeybee, <i>Apis mellifera</i> L. | API, Apinae | A |
| | Margin | R: Little Honeybee, <i>Apis florea</i> Fabr. (swarm on hive) | API, Apinae | Z |

2019 August 27 (Scouts) (MS/4 & SS/1) (DJB190518a&b)

| | | | | |
|-----|-----------|------------------------------|--------|-------|
| d | 250fr | Stylized Bee over flower | Apidae | S C |
| N/A | SS Margin | LR: Stylized Bee over flower | Apidae | S C Z |

GUINEA**2019 August 28** (Bees) (MS/4 & SS/1) (GU190314a&b)

| | | | | |
|-----|------------|---|-------------------|---|
| a | 12500fr | Blue-banded Bee, <i>Amegilla cingulata</i> Fabr. | API, Apinae | A |
| b | 12500fr | Buff-tailed Bumblebee, <i>Bombus terrestris</i> L. | API, Apinae | A |
| c | 12500fr | Carder Bee, <i>Anthidium florentinum</i> Fabr. | MEG, Megachilinae | A |
| d | 12500fr | Eastern Carpenter Bee, <i>Xylocopa virginica</i> L. | API, Xylocopinae | A |
| N/A | SS 50000fr | Sugar Bag Bee, <i>Tetragonula carbonaria</i> Smith | API, Apinae | A |
| | Margin | Top: Western Honeybee, <i>Apis mellifera</i> L. | API, Apinae | Z |

GUINEA-BISSAU**2019 July 17** (Red Cross Anti-malaria) (MS/5 & SS/1) (GB190709a&b)

| | | | | |
|-----|---------|---------------------------------------|------------------|-----|
| a | 640fr | <i>Anopheles</i> sp. | CUL, Anophelinae | U B |
| b | 640fr | <i>Anopheles</i> sp. | CUL, Anophelinae | U B |
| | Label | Same species (tiny symbol) | CUL, Anophelinae | U Z |
| N/A | Margin. | UR: <i>Anopheles</i> sp. (silhouette) | CUL, Anophelinae | U Z |
| | Label | Same species (symbol) | CUL, Anophelinae | U Z |

2019 August 13 (Bee-eaters) (MS/4 & SS/1) (GB190803a&b)

| | | | | |
|-----|-----------|--------------------------|--------|-----|
| c | 800fr | U/I Bee (in bird's beak) | Apidae | U C |
| d | 800fr | U/I Bee (in bird's beak) | Apidae | U C |
| N/A | SS 3300fr | U/I Bee (in bird's beak) | Apidae | U C |

2019 August 13 (Bees) (MS/4 & SS/1) (GB190806a&b)

| | | | | |
|-----|-----------|--|-------------------|---|
| a | 800fr | Gray Mining Bee, <i>Andrena cineraria</i> L. | AND, Andreninae | A |
| b | 800fr | European Wool-carder Bee, <i>Anthidium manicatum</i> L. | MEG, Megachilinae | A |
| c | 800fr | Little Angel Honeybee, <i>Tetragonisca angustula</i> Latreille | API, Apinae | A |
| d | 800fr | Northeast Jandaira Bee, <i>Melipona subnitida</i> Ducke | API, Apinae | A |
| N/A | SS 3300fr | Buff-tailed Bumblebee, <i>Bombus terrestris</i> L. | API, Apinae | A |
| | Margin | LL & R: Western Honeybees, <i>Apis mellifera</i> L. | API, Apinae | Z |

MALDIVIVE ISLANDS**2019 June 15** (Butterflies) (MS/4 & SS/1) (MLD190509a&b)

| | | | | |
|-----|--------|---|-------------------|---|
| a | 20r | Pale Clouded Yellow, <i>Colias hyale</i> L. | PIE, Coliadinae | A |
| b | 20r | Silver-studded Blue, <i>Plebejus argus</i> L. | LYC, Polyommatae | A |
| c | 20r | Malachite, <i>Siproeta stelenes</i> L. | NYM, Nymphalinae | A |
| d | 20r | Green Hairstreak, <i>Callophrys rubi</i> L. | LYC, Theclinae | A |
| N/A | SS 60r | Silver-bordered Fritillary, <i>Clossiana selene</i> D. & S. | NYM, Heliconiinae | A |
| | Margin | L: Speckled Yellow Moth, <i>Pseudopanthera macularia</i> L. | GEO, Ennominae | Z |

MALDIVE ISLANDS (continued) 2019 August 29 (Bee-eaters) (MS/4 & SS/1) (MLD190608a&b)

| | | | | |
|-----|--------|-----------------------------------|---------|-------|
| c | 22r | U/I Bee (in bird's beak) | Apidae | U C |
| N/A | SS 70r | U/I Bee (w/ birds) | Apidae | U C |
| | Margin | R: U/I Dragonfly (in bird's beak) | Odonata | U B Z |

2019 October 3 (Bees) (MS/4 & SS/1) (MLD190704a&b)

| | | | | |
|-----|--------|---|--|--------|
| a | 22r | Japanese Honeybee, <i>Apis cerana</i> ssp. <i>japonica</i> Radeszkowsky | API, Apinae | A |
| b | 22r | L: European Wool-carder Bee, <i>Anthidium manicatum</i> L. R: Blue Mason Bee, <i>Osmia caerulescens</i> L. | MEG, Megachilinae MEG, Megachilinae | B B |
| c | 22r | L: Buff-tailed Bumblebee, <i>Bombus terrestris</i> L. R: Western Honeybee, <i>Apis mellifera</i> L. | API, Apinae API, Apinae | B B |
| d | 22r | Violet Carpenter Bee, <i>Xylocopa valga</i> Gerstaecker | API, Xylocopinae | A |
| | Margin | UR: Buff-tailed Bumblebee, <i>Bombus terrestris</i> L. | API, Apinae | Z |
| N/A | SS 70r | Western Honeybee, <i>Apis mellifera</i> L. | API, Apinae | A |
| | Margin | LL, UR, MR: Same species | API, Apinae | Z |

MOZAMBIQUE 2019 August 16 (Bees) (MS/4 & SS/1) (MOZ190413a&b)

| | | | | |
|-----|---------|--|-------------------|---|
| a | 116m | Red-tailed Bumblebee, <i>Bombus lapidarius</i> L. | API, Apinae | A |
| b | 116m | Western Honeybee, <i>Apis mellifera</i> L. | API, Apinae | A |
| c | 116m | Western Honeybee, <i>Apis mellifera</i> L. (w/ beekeeper & hive) | API, Apinae | A |
| d | 116m | Violet Carpenter Bee, <i>Xylocopa violacea</i> L. | API, Xylocopinae | A |
| N/A | SS 300m | Western Honeybee, <i>Apis mellifera</i> L. | API, Apinae | A |
| | Margin | <i>Megachile fortis</i> Cresson | MEG, Megachilinae | Z |

2019 August 16 (Spiders) (SS/1) (MOZ190414b)

| | | | | |
|-----|-----------|---|-------------|-----|
| N/A | SS Margin | R: Spider eating U/I Caterpillar in web | Lepidoptera | U Z |
|-----|-----------|---|-------------|-----|

2019 August 16 (210th anniv. Darwin) (MS/4 & SS/1) (MOZ190428a&b)

| | | | | |
|-----|-----------|--|-------------------|-------|
| c | 116m | U/I Longwing Butterflies (w/ Darwin portrait) | NYM, Heliconiinae | U C |
| N/A | SS Margin | L: U/I Longwing Butterflies (w/ Darwin portrait) | NYM, Heliconiinae | U C Z |

2019 October 1 (Butterflies) (MS/4 & SS/1) (MOZ190518a&b)

| | | | | |
|-----|---------|--|-------------------|---|
| a | 116m | Green Hairstreak, <i>Callophrys rubi</i> L. | LYC, Theclinae | A |
| b | 116m | Gulf Fritillary, <i>Agraulis vanillae</i> L. | NYM, Heliconiinae | A |
| c | 116m | White Peacock, <i>Anartia jatrophae</i> Johansson | NYM, Nymphalinae | A |
| d | 116m | Marbled White, <i>Melanargia galathea</i> L. | NYM, Satyrinae | A |
| N/A | SS 300m | Peacock, <i>Nymphalis io</i> L. | NYM, Nymphalinae | A |
| | Margin | Bot: Pipevine Swallowtail, <i>Battus philenor</i> L. | PAP, Papilioninae | Z |

NIGER 2019 August 24 (Bee-eaters) (MS/4 & SS/1) (NIG190417a&b)

| | | | | |
|-----|-----------|--|-------------|-----|
| b | 800fr | U/I Bee (in bird's beak) | Apidae | U C |
| N/A | SS Margin | UR: Western Honeybee, <i>Apis mellifera</i> L. (w/ bird) | API, Apinae | C Z |

SIERRA LEONE 2019 June 27 (Anti-malaria) (MS/4 & SS/1) (SRL190611a&b)

| | | | | |
|-----|-----------|---|------------------|-------|
| a | 12500le | Stylized <i>Anopheles</i> sp. (in drop of blood) | CUL, Anophelinae | U S |
| b | 12500le | <i>Anopheles</i> sp. (symbol) (boy w/ bed net) | CUL, Anophelinae | U B |
| c | 12500le | <i>Anopheles</i> sp. (symbol) (dusting insecticide) | CUL, Anophelinae | U B |
| N/A | SS Margin | Stylized <i>Anopheles</i> sp. (in drop of blood) | CUL, Anophelinae | U S Z |

2019 July 25 (Bees) (MS/4 & SS/1) (SRL190710a&b)

| | | | | |
|---|---------|--|------------------|---|
| a | 12500le | Brown Bumblebee, <i>Bombus pascuorum</i> Scopoli | API, Apinae | A |
| b | 12500le | Violet Carpenter Bee, <i>Xylocopa violacea</i> L. | API, Xylocopinae | A |
| c | 12500le | Two-spotted Mining Bee, <i>Andrena accepta</i> Viereck | AND, Andreninae | A |
| d | 12500le | Great Banded Furrow Bee, <i>Halictus scabiosae</i> Rossi | HAL, Halictinae | A |
| | Margin | LL & UR: Western Honeybee, <i>Apis mellifera</i> L. | API, Apinae | Z |

SIERRA LEONE (continued)

| | | | | |
|-----|------------|--|-------------|-----|
| N/A | SS 50000le | Western Honeybee, <i>Apis mellifera</i> L. | API, Apinae | A |
| | Margin | UL, LL, UR: Bumblebee, <i>Bombus</i> sp. | API, Apinae | U Z |

2019 July 25 (Lizards) (SS/1) (SRL190718b)

| | | | | |
|-----|------------|---------------------------------|-------------|-------|
| N/A | SS Margin: | UL: U/I Bee (in lizard's mouth) | Hymenoptera | U C Z |
|-----|------------|---------------------------------|-------------|-------|

2019 August 30 (Endangered Species) (MS/4 & SS/1) (SRL190806a&b)

| | | | | |
|-----|-----------|--|---------------|---|
| a | 12500le | Monarch, <i>Danaus plexippus</i> L. (w/ Richard Nixon) | NYM, Danainae | B |
| N/A | SS Margin | UR: Monarch, <i>Danaus plexippus</i> L. | NYM, Danainae | Z |

TOGO**2019 July 5** (Bees) (MS/4 & SS/1) (TG190306a&b)

| | | | | |
|-----|-----------|---|------------------|---|
| a | 800fr | Tawny Mining Bee, <i>Andrena fulva</i> Mueller | AND, Andreninae | A |
| b | 800fr | Valley Carpenter Bee, <i>Xylocopa varipuncta</i> Patton ♂ | API, Xylocopinae | A |
| c | 800fr | Red-tailed Bumblebee, <i>Bombus lapidarius</i> L. | API, Apinae | A |
| d | 800fr | Violet Carpenter Bee, <i>Xylocopa violacea</i> L. | API, Xylocopinae | A |
| N/A | SS 3300fr | Western Honeybee, <i>Apis mellifera</i> L. | API, Apinae | A |
| | Margin | UL: Gray-banded Carpenter Bee, <i>Andrena denticulata</i> Kirby | AND, Andreninae | Z |

2019 July 5 (Ants) (MS/4 & SS/1) (TG190308a&b)

| | | | | |
|-----|-----------|---|-----------------|-----|
| a | 800fr | Giant Forest Ant, <i>Dinomyrmex gigas</i> Latreille. Cap: <i>Camponotus</i>) | FOR, Formicinae | A |
| b | 800fr | Field Ant, <i>Lasius niger</i> L. | FOR, Formicinae | A |
| c | 800fr | Red Wood Ant, <i>Formica rufa</i> L. | FOR, Formicinae | A |
| d | 800fr | Weaver Ant, <i>Oecophylla smaragdina</i> Fabr. | FOR, Formicinae | A |
| | Margin | L: U/I Ant swarm | Formicidae | U Z |
| N/A | SS 3300fr | Red Wood Ant, <i>Formica rufa</i> L. | FOR, Formicinae | A |
| | Margin | UL & LL: Same species | FOR, Formicinae | Z |
| | | LR: Black Giant Ant, <i>Camponotus vagus</i> Scopoli | FOR, Formicinae | Z |

ANGOLA**2018 December 10** (Butterflies) (Set/4 & SS/1) (ANG18110a&b)

Jose Reis writes: "Today, October 4th, I went to the Philately Department of Angolan Posts and purchased two sets of Butterflies (stamps and MS), issued December 10, 2018. This disproves the belief that these issues are only distributed by Stamperija and never placed for sale in Angola."

I note that Scott has also accepted them as legitimate and assigned them catalog numbers. Each stamp was also issued in MS/10.

| | | | | |
|------|----------|--|-------------------|---|
| 1500 | 300k | Congo Green Swallowtail, <i>Papilio phorcas congoanus</i> Rothschild | PAP, Papilioninae | A |
| 1501 | 300k | Large Fairy Hairstreak, <i>Hypolycaena antifaunus</i> Westwood | LYC, Theclinae | A |
| 1502 | 300k | Lesser Blue Charaxes, <i>Charaxes numenes</i> Hewitson | NYM, Charaxinae | A |
| 1503 | 300k | Green Charaxes, <i>Charaxes eupale</i> Drury | NYM, Charaxinae | A |
| 1560 | SS 1200k | Golden Pansy, <i>Junonia sophia</i> Fabr. | NYM, Nymphalinae | A |
| | Margin | UL: Large Fairy Hairstreak, <i>Hypolycaena antifaunus</i> Westwood | LYC, Theclinae | Z |
| | | LL: Lesser Blue Charaxes, <i>Charaxes numenes</i> Hewitson | NYM, Charaxinae | Z |
| | | UR: Protea Scarlet, <i>Capys alphaeus</i> Cramer | LYC, Theclinae | Z |
| | | LR: Shining Red Charaxes, <i>Charaxes zingha</i> Stoll | NYM, Charaxinae | Z |



PALEONTOLOGY

Editor

Michael Kogan, BU1863

New Listings



| Scott# | Denom | Common Name/Scientific Name | Family | Code |
|---|------------|--|------------------------|------|
| CENTRAL AFRICAN REPUBLIC 2019 August 22 (Extinct Animals) (MS/4 & SS/1) ^[1] | | | | |
| a | 850fr | <i>Platybelodon grangeri</i> | †Amebelodontidae | A |
| b | 850fr | †Saber-toothed Cat, <i>Smilodon fatalis</i> | Felidae | A |
| c | 850fr | †Dire Wolf, <i>Canis dirus</i> | Canidae | A |
| d | 850fr | †Giant Warthog, <i>Metridiochoerus hopwoodi</i> | Suidae | A |
| | Margin | U/I species | | U Z |
| N/A | SS 3300fr | †Woolly Rhinoceros, <i>Coelodonta antiquitatis</i> | Rhinocerotidae | A |
| | Margin | Bot: Same species | Rhinocerotidae | Z |
| | | ML & MR: †Mammoth, <i>Mammuthus primigenius</i> | Elephantidae | Z |
| DJIBOUTI 2019 August 27 (Flying Dinosaurs) (MS/4 & SS/1) ^[1] | | | | |
| a | 250fr | <i>Eudimorphodon ranzii</i> | †Eudimorphodontidae | A |
| b | 250fr | <i>Caviramus schesaplanensis</i> | †Raeticodactylidae | A |
| c | 250fr | <i>Caulkicephalus trimicrodon</i> | †Ornithocheiridae | A |
| d | 250fr | U/I Pterosaur | Order: †Pterosauria | U A |
| N/A | SS 1000fr | <i>Harpactognathus gentryii</i> | Clade: †Novialoidea | A |
| | Margin | UR: <i>Caviramus schesaplanensis</i> | †Raeticodactylidae | Z |
| | | LR: <i>Eudimorphodon ranzii</i> | †Eudimorphodontidae | Z |
| GUINEA 2019 August 28 (Flying Dinosaurs) (MS/4 & SS/1) ^[1] | | | | |
| a | 12500fr | <i>Pterodactylus antiquus</i> | †Pterodactylidae | A |
| b | 12500fr | <i>Alanqa saharica</i> | †Azhdarchidae | A |
| c | 12500fr | <i>Cearadactylus atrox</i> | Order: †Pterosauria | A |
| d | 12500fr | <i>Eudimorphodon ranzii</i> | †Eudimorphodontidae | A |
| N/A | SS 50000fr | <i>Caulkicephalus trimicrodon</i> | †Ornithocheiridae | A |
| | Margin | UR: <i>Alanqa saharica</i> | †Azhdarchidae | Z |
| | | LR: <i>Eudimorphodon ranzii</i> | †Eudimorphodontidae | Z |
| GUINEA 2019 August 28 (Extinct Species) (MS/4 & SS/1) ^[1] | | | | |
| a | 12500fr | <i>Moeritherium lyonsi</i> | †Moeritheriidae | A |
| b | 12500fr | †Saber-toothed Cat, <i>Smilodon fatalis</i> | Felidae | A |
| c | 12500fr | Dodo, <i>Raphus cucullatus</i> | †Raphinae | A |
| d | 12500fr | Thylacine, <i>Thylacinus cynocephalus</i> | †Thylacinidae | A |
| N/A | SS 50000fr | †Woolly Rhinoceros, <i>Coelodonta antiquitatis</i> | Rhinocerotidae | A |
| | Margin | Top: †Mammoth, <i>Mammuthus primigenius</i> | Elephantidae | Z |
| GUINEA-BISSAU 2019 July 17 (Dinosaurs) (MS/5+ label & SS/1+ label) ^[1] | | | | |
| a | 640fr | <i>Tyrannosaurus rex</i> | †Tyrannosauridae | A |
| b | 640fr | <i>Gigantoraptor erlianensis</i> | †Caenagnathidae | A |
| c | 640fr | <i>Thalassodromeus sethi</i> | Clade: †Azhdarchoidea | A |
| d | 640fr | <i>Argentinosaurus huinculensis</i> | Clade: †Lognkosauria | A |
| e | 640fr | <i>Giganotosaurus carolini</i> | †Carcharodontosauridae | A |
| | Label | <i>Dimetrodon limbatus</i> | †Sphenacodontidae | A |

GUINEA-BISSAU (continued)

| | | | | |
|-----|-----------|--|----------------------|-----|
| N/A | SS 3300fr | <i>Dimetrodon limbatus</i> | †Sphenacodontidae | A |
| | Label | <i>Tyrannosaurus rex</i> | †Tyrannosauridae | A |
| | Margin | R: <i>Argentinosaurus huinculensis</i> | Clade: †Lognkosauria | Z |
| | | R: U/I Flying reptile | | U Z |

2019 July 17 (Extinct Species) (MS/5 & SS/1)^[1]

| | | | | |
|-----|-----------|--|-------------------|---|
| a | 640fr | <i>Megatherium americanum</i> | †Megatheriidae | A |
| b | 640fr | Dodo, <i>Raphus cucullatus</i> | †Raphinae | A |
| c | 640fr | <i>Kyptoceras amatorum</i> | †Protoceratidae | A |
| d | 640fr | <i>Macrauchenia patachonica</i> | †Macrauchiidae | A |
| e | 640fr | †Woolly Rhinoceros, <i>Coelodonta antiquitatis</i> | Rhinocerotidae | A |
| | Margin | UL: †Saber-toothed Cat, <i>Smilodon fatalis</i> | Felidae | Z |
| N/A | SS 3300fr | †Short-faced Bear, <i>Arctodus simus</i> | Ursidae | A |
| | Margin | R: †Mammoth, <i>Mammuthus primigenius</i> | Elephantidae | Z |
| | | UL: <i>Arsinoitherium zitteli</i> | †Arsinoitheriidae | Z |

MOZAMBIQUE**2019 August 16** (Prehistoric Water Animals) (MS/4 & SS/1)^[1]

| | | | | |
|-----|---------|--|-----------------------|-----|
| a | 116m | <i>Helicoprion bessonowi</i> | †Helicoprionidae | A |
| b | 116m | Ichthyosaur sp. | Order: †Ichthyosauria | U A |
| c | 116m | <i>Shonisaurus popularis</i> | †Shonisauridae | A |
| d | 116m | Megalodon, <i>Carcharocles megalodon</i> (Cap: <i>Carcharodon m.</i>) | †Otodontidae | A |
| N/A | SS 300m | <i>Eurhinosaurus longirostris</i> | †Leptonectidae | A |
| | Margin | L: <i>Shonisaurus popularis</i> | †Shonisauridae | Z |

MOZAMBIQUE**2019 August 16** (210th anniv. Charles Darwin) (MS/4 & SS/1)^[1]

| | | | | |
|-----|---------|---|----------------|-----|
| a | 116m | Eurasian Bullfinch, <i>Pyrrhula pyrrhula</i> | Fringillidae | B |
| | | Mangrove Finch, <i>Camarhynchus heliobates</i> | Thraupidae | B |
| b | 116m | Portrait: Charles Darwin (1809–1882) (w/ U/I finch) | | R |
| c | 116m | Portrait: Charles Darwin (1809–1882) | | R |
| | | Bkgrd: <i>Parasaurolophus?</i> (skeleton) | †Hadrosauridae | U B |
| d | 116m | † <i>Australopithecus afarensis</i> (skull) | Hominidae | B |
| | | † <i>Homo erectus</i> (skull) | Hominidae | B |
| N/A | SS 300m | Portrait: Charles Darwin (w/ HMS <i>Beagle</i>) | | R |
| | | Bkgrd: <i>Parasaurolophus?</i> (skeleton) | †Hadrosauridae | U Z |

NIGER**2019 July 12** (African Union Conference) (MS/12)

| | | | | |
|---|--------|--|--|-----|
| g | 1000fr | U/I Dinosaur (skeleton at Dioiri Hamani Airport) | | U B |
|---|--------|--|--|-----|

ST THOMAS & PRINCE ISLANDS **2019 August 14** (Prehistoric Water Animals) (MS/4 & SS/1)^[1]

| | | | | |
|-----|---------|--|-------------------|---|
| a | 31d | Megalodon, <i>Carcharocles megalodon</i> | †Otodontidae | A |
| b | 31d | L: <i>Archegosaurus decheni</i> | †Archegosauridae | B |
| | | R: <i>Geosaurus maximus</i> | †Metriorhynchidae | B |
| c | 31d | Top: <i>Sarcosuchus imperator</i> | †Pholidosauridae | B |
| | | Bot: <i>Dipterus valenciennesi</i> | †Dipteridae | B |
| d | 31d | <i>Kronosaurus queenslandicus</i> | †Pliosauridae | A |
| N/A | SS 124d | <i>Dolichorhynchops osborni</i> | †Polycotylidae | A |
| | Margin | UR: Megalodon, <i>Carcharocles megalodon</i> | †Otodontidae | Z |
| | | LR: <i>Kronosaurus queenslandicus</i> | †Pliosauridae | Z |

SIERRA LEONE**2019 June 27** (Dinosaurs) (MS/4 & SS/1)^[1]

| | | | | |
|---|---------|-------------------------------------|----------------------|---|
| a | 12500le | <i>Coahuilaceratops magnacuerna</i> | †Ceratopsidae | A |
| b | 12500le | Bot: <i>Parasaurolophus walkeri</i> | †Hadrosauridae | B |
| | | Top: <i>Altirhinus kurzanovi</i> | Order: †Ornithischia | B |

SIERRA LEONE (continued)

| | | | | |
|-----|------------|--------------------------------------|----------------------|---|
| c | 12500le | Bot: <i>Spinosaurus aegyptiacus</i> | †Spinosauridae | B |
| | | Top: <i>Kentrosaurus aethiopicus</i> | †Stegosauridae | B |
| d | 12500le | <i>Stegosaurus stenops</i> | †Stegosauridae | A |
| N/A | SS 50000le | <i>Suchomimus tenerensis</i> | †Spinosauridae | A |
| | | UR: <i>Altirhinus kurzanovi</i> | Order: †Ornithischia | Z |
| | | LR: <i>Kentrosaurus aethiopicus</i> | †Stegosauridae | Z |

2019 August 30 (Flying Dinosaurs) (MS/4 & SS/1)^[1]

| | | | | |
|-----|------------|--------------------------------|-------------------|---|
| a | 12500le | <i>Caupedactylus ybaka</i> | †Tapejaridae | A |
| b | 12500le | <i>Darwinopterus modularis</i> | †Wukongopteridae | A |
| c | 12500le | <i>Pteranodon longiceps</i> | †Pteranodontidae | A |
| d | 12500le | <i>Azhdarcho lancicollis</i> | †Azhdarchidae | A |
| N/A | SS 50000le | <i>Dimorphodon macronyx</i> | †Dimorphodontidae | A |
| | | R: <i>Pteranodon longiceps</i> | †Pteranodontidae | Z |

2019 June 25 (Meteorites) (MS/4 & SS/1)^[1]

| | | | | |
|-----|------------|---|---------------------|-----|
| a | 12500le | Bkgrd: U/I dinosaur (w/ chondrite meteorite) | †Diplodocidae | U C |
| d | 12500le | Bkgrd: U/I flying reptile (w/ Sikhote-Alin meteorite) | | U C |
| N/A | SS 50000le | <i>Eudimorphodon ranzii</i> (w/ carbonaceous chondrite meteorite) | †Eudimorphodontidae | B |

TOGO**2019 June 25** (Prehistoric Water Animals) (MS/4 & SS/1)^[1]

| | | | | |
|-----|-----------|---|------------------|---|
| a | 800fr | <i>Liopleurodon ferox</i> | †Pliosauridae | A |
| b | 800fr | <i>Eurhinosaurus longirostris</i> | †Leptonectidae | A |
| c | 800fr | <i>Dunkleosteus terrelli</i> (Cap: <i>Dinichthys terrelli</i>) | †Dunkleosteidae | A |
| d | 800fr | <i>Dipterus valenciennesi</i> | †Dipteridae | A |
| N/A | SS 3300fr | <i>Eurypterus remipes</i> | †Eurypteridae | A |
| | Margin | Bot: <i>Cameroceras trentonense</i> | †Endoceratidae | Z |
| | | L: <i>Archegosaurus decheni</i> | †Archegosauridae | Z |

UNITED STATES**2019 August 29** (*Tyrannosaurus rex*) (Block/4)

| | | | | |
|------|-------|--|------------------|---|
| 5410 | (55c) | <i>T. rex</i> (newly hatched covered with downy feathers) | †Tyrannosauridae | A |
| 5411 | (55c) | <i>T. rex</i> (adult approaching through a forest clearing) (lenticular) | †Tyrannosauridae | A |
| 5412 | (55c) | <i>T. rex</i> (with young Triceratops) (lenticular) | †Tyrannosauridae | A |
| 5413 | (55c) | <i>T. rex</i> (bare-skinned juvenile chasing a primitive mammal) | †Tyrannosauridae | A |

Two stamps employ lenticular technology, causing the image to shift in appearance as you rotate the image.

Other Stamps to Consider

Niah Caves, shown on the SS, is a limestone cave and archeological site. The cave is an important prehistorical site where human remains from 40,000 years ago have been found. This is the oldest recorded human settlement in east Malaysia. More recent studies published in 2006, have shown evidence of the first human activity at the Niah Caves from c.46,000 to c.34,000 years ago. Painted Cave, situated in a much smaller limestone block of its own, some 150 meters from the Great Cave block's southeastern tip, has rock paintings dated as 1,200 years old. Archeologists have claimed a much earlier date for stone tools found in the Mansuli Valley, near Lahad Datu in Sabah, but precise dating analysis has not yet been published.

**MALAYSIA****2019 August 28** (Caves) (Set/3 & SS/1)

| | | | | |
|-----|--------|-----------------------------|--|---|
| N/A | SS \$5 | Niah Painted Cave (Sarawak) | | R |
|-----|--------|-----------------------------|--|---|

Local Stamps

Note: This stamp was issued by an unrecognized, self-governed, or disputed territory. It can be used inside of the territory, and in some cases even for international mails. However, according to *Fédération Internationale de Philatélie* (FIP) regulations, issues from countries that are not recognized by the Universal Postal Union are not allowed in exhibitions organized or sponsored by FIP. The FIP recommends that collectors avoid these stamps in their collections.

ABKHAZIA **2019 September 14** (Archeology of Abkhazia)
 N/A 10r U/I Ammonite (fossil & reconstruction) Class: Cephalopoda U A

On 14 September, the Abkhazia Ministry of Information issued an Ammonite stamp among many other stamps. The stamp with face value 10r pays the domestic letter rate. It was issued in sheets of ten stamps in perforated and imperforate variations. The title of the sheet written in local and English languages is “Archeology of Abkhazia.” Unfortunately this is not the first time that postal authorities around the world have mixed up Archeology with Paleontology. Even though since 2017, Russian Post has been concerned with international mail of Abkhazia, as this territory de facto is controlled by Russia, the stamps of Abkhazia are issued as collectible items only. So even when enough value affixed in stamps, sender is asked to pay again the postage in cash. Then they will chop a mark as “postage paid.”



Postal Stationery & Special Covers

MOLDOVA **2019 October 24** (National Museum of Ethnography & Natural History)
 The postcard and imprinted stamp shows the building of the museum. It commemorates the 130th anniversary of National Museum of Ethnography and Natural History.

N/A 1.30l Natural History Museum (postal stationery with imprinted stamp)

Personalized Issue

NETHERLANDS **2019 October 20** (53rd Philatelic Day at Limburg in Klimmen)
 Many fossils of *Mosasaurus* have been found near Maastricht, the largest city of the province of Limburg. This stamp paid the domestic letter rate up to 20 grams.

N/A 87c *Mosasaurus hoffmanni* (skull) †Mosasauridae A

Commemorative Postmarks

ABKHAZIA **2019 September 14** (Archeology of Abkhazia)
 The postmark is related to the Ammonite stamp and used on its FDC.



FRANCE **2019 October 20** (250th anniv. Georges Cuvier)
 Jean Léopold Nicolas Frédéric, Baron Cuvier (23 August 1769–13 May 1832), known as Georges Cuvier, was a French naturalist and zoologist. Cuvier was a major figure in natural sciences research in the early 19th century, and was instrumental in establishing the fields of comparative anatomy and paleontology through his work in comparing living animals with fossils. In 1808, Cuvier identified a fossil-found in Maastricht as a giant marine lizard, which he named *Mosasaurus*, the first known mosasaur, as shown on personalized stamp and postmark of the Netherlands.

ITALY 2019 **September 14** (30th anniv. Football Association of Carioca)
Tyrannosaurus rex image on postmark of soccer club.

MOLDOVA

The postmark shows the building of the museum. One of the most famous artifacts in the museum is an almost complete skeleton of *Deinotherium giganteum*, which is shown on a stamp in 1995, and the tab between two museum stamps issued in 2014:



2019 October 24 (National Museum of Ethnography & Natural History)

NETHERLANDS

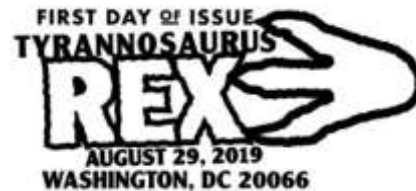
The postmark is related to personalized stamp of the *Mosasaurus hoffmanni* skull and used on its FDC.

2019 October 20 (53rd Philatelic Day at Limburg in Klimmen)

UNITED STATES

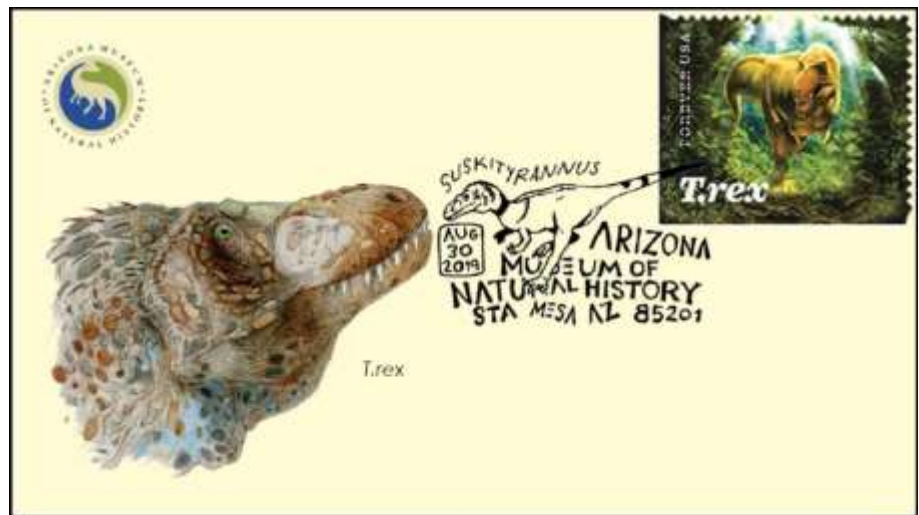
Two commemorative postmarks issued by USPS on the same day as the *Tyrannosaurus rex* stamps and used on official FDC and philatelic souvenirs.

2019 August 29 (*Tyrannosaurus rex*) (Block/4)



In following two days, 30–31 August, more than two dozen commemorative *T. rex* postmarks were issued around the USA. Half of them look cartoonish. Two more postmarks were issued in September and one more in October. The most interesting postmark was issued by **Arizona Museum of Natural History** (AZMNH), who also issued its own set of FDCs.

The postmark and illustration on the cover depict a newly-described tyrannosaur *Suskityrannus hazelae*, an early tyrannosaur that is housed at the AZMNH and was found by teen volunteer Sterling Nesbitt who has since become a paleontologist. Dr. Nesbitt was in fact lead author on the recent paper describing *S. hazelae*, naming the species in honor of Hazel Wolfe, co-founder and field manager of the Zuni Basin Paleontological Project, under which the dinosaur was discovered.



The following two pages show the full list of the *T. rex* postmarks:



August 31, 2019
 United States Postal Service
 T-Rex Station
 Postmaster
 30 West Bel Air Avenue
 Aberdeen, MD 21001-9998



August 31, 2019
 United States Postal Service
 Dinosaur Station
 Postmaster
 913 Bethel Street
 Clover, SC 29710-0019



August 31, 2019
 United States Postal Service
 T-Rex Station
 Postmaster
 3900 Crown Road
 Southeast
 Atlanta, GA 30304-9998



August 31, 2019
 United States Postal Service
 T-Rex Station
 Postmaster
 409 West Main Street
 Elm City, NC 27822-9998



August 31, 2019
 United States Postal Service
 T-Rex Station
 Postmaster
 6502 Belair Road
 Baltimore, MD 21206-9998



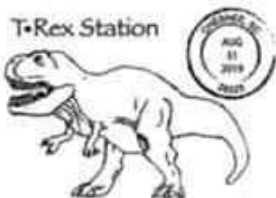
August 31, 2019
 United States Postal Service
 T-Rex Station
 Postmaster
 250 Georgia Avenue
 Fayetteville, GA 30214-9998



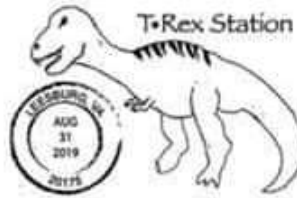
August 31, 2019
 United States Postal Service
 T-Rex Station
 Postmaster
 200 Wilson Point Road
 Baltimore, MD 21220-9998



August 31, 2019
 United States Postal Service
 T-Rex Station
 Postmaster
 35 Patterson Road
 Lawrenceville, GA 30044-9998



August 31, 2019
 United States Postal Service
 T-Rex Station
 Postmaster
 103 Chester Street
 Chesnee, SC 29323-9998



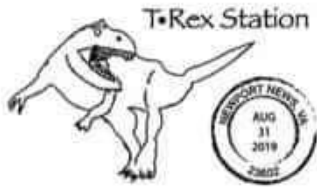
August 31, 2019
 United States Postal Service
 T-Rex Station
 Postmaster
 25 Catoctin Circle
 Southeast
 Leesburg, VA 20175-9998



August 31, 2019
 United States Postal Service
 T-Rex Station
 Postmaster
 913 Bethel Street
 Clover, SC 29710-0019



August 31, 2019
 United States Postal Service
 T-Rex Station
 Postmaster
 8801 Sudley Road
 Manassas, VA 20110-9998



August 31, 2019
United States Postal Service
T-Rex Station
Postmaster
14104 Warwick Boulevard
Newport News, VA 23502-9998



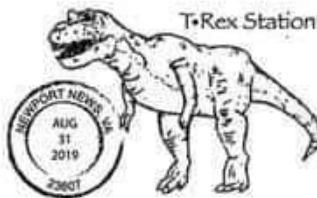
August 31, 2019
United States Postal Service
T-Rex Station
Postmaster
23285 Highway 261 South
Wedgefield, SC 29168-9004



August 31, 2019
United States Postal Service
T-Rex Station
Postmaster
685 Turnberry Boulevard
Newport News, VA 23608-9998



August 31, 2019
United States Postal Service
T-Rex Station
Postmaster
419 East 2nd Street
West Jefferson, NC 28694-9641



August 31, 2019
United States Postal Service
T-Rex Station
Postmaster
101 25th Street
Newport News, VA 23607-9998



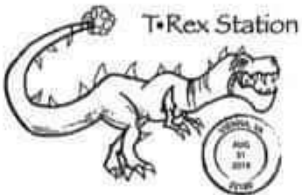
August 30, 2019
Arizona Museum of Natural History
Arizona Museum of Natural History Station
Postmaster
135 North Center Street
Mesa, AZ 85201-9998



August 31, 2019
United States Postal Service
T-Rex Station
Postmaster
10070 Dorchester Road
Summerville, SC 29485-9998



September 27, 2019
United States Postal Service
T-Rex Station
Postmaster
1323 Bridge Barrier Road
Carolina Beach, NC 28428-9998



August 31, 2019
United States Postal Service
T-Rex Station
Postmaster
200 Lawyers Road
Northwest
Vienna, VA 22180-9998



September 21, 2019
United States Postal Service
Museum of the Rockies Station
Postmaster
96 North Weaver Street
Belgrade, MT 59714-9998



August 31, 2019
United States Postal Service
T-Rex Station
Postmaster
333 East Washington Street
Walterboro, SC 29488-9998



October 12, 2019
United States Postal Service
Omaha Children's Museum Excavation Station
Postmaster
8005 Lockheed Court
Omaha, NE 68110-9998

Future Issues

2019.12.06:

Michel Stamp Catalog: *Dinos – Whole World* 1st edition. Stamps with prehistoric animals from all over the world. Planned for 3 May 2019, but delayed. Clear design and modern layout due to their innovative production process. Approximately 2,500 color illustrations and about 20,000 price quotations. New issues up to the Michel Rundschau in January 2019, have been catalogued in this edition. Pages: approx. 328, Format: Paperback, Language: German

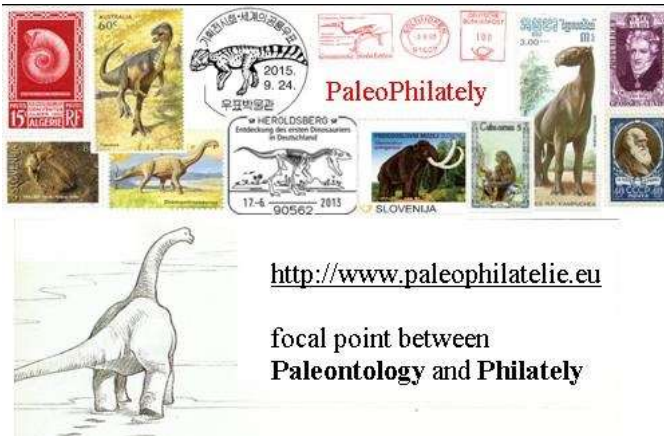


Notes:

[1] Commercial issue: Stamps issued only for sale to collectors, not used for postal purpose. Stamps of countries that issued excessive or too expensive stamps. Not recommended for serious collectors.

If you know about any recent or future Paleontology-related stamps not listed above, please send a short message to Associate Editor Mr. Michael Kogan (admin@paleophilatelie.eu), or by post to the Editor, Jack R. Congrove (address on inside cover).

Images and detailed descriptions of all stamps mentioned above can be viewed on the following website: <http://www.paleophilatelie.eu/year/current.html>.



<http://www.paleophilatelie.eu/year/current.html>
list of all new issues

http://www.paleophilatelie.eu/phil_catalogue.html
chronology and country based catalog

http://www.paleophilatelie.eu/stamps_overview.html
gallery of stamps, FDC, circulated covers

Contact: admin@paleophilatelie.eu

Join us on Facebook: PaleoPhilately group



BIOLOGY REFERENCE WEBSITES

This section contains a listing of web links to on-line references relating to biology topics on stamps and general philatelic information. We are providing this information to assist members in research and not to endorse the sites listed in any way. If readers know of, or use other useful sites, please send the links to your editor and we will include them in future editions. New or changed entries since the last publication are indicated with an asterisk (*).

STAMP ISSUES

Catawiki. Listings and illustrations of stamps for sale by topic for every theme from A to Z.

<http://www.catawiki.com/catalog/stamps/100283-themes-topics>

Collectors Club of Chicago: Philatelic Encyclopedia. A comprehensive compendium of definitions for philatelic terms and topics including those in more than 40 foreign languages. The parent site has many additional reports and references. Portions are still under construction.

<http://www.collectorsclubchicago.org/philatelic-encyclopedia.php>

Delcampe. Worldwide listings and illustrations of stamps for sale. They have revised their website to make it more user-friendly.

http://www.delcampe.net/en_GB/marketplace/stamps/

eBay. Worldwide listings and illustrations of stamps, covers, postcards, and other collectibles for sale.

<http://www.ebay.com/>

IGPC. Formerly Cyber Stamps. On-line postage stamp catalogue of worldwide topical issues.

<https://www.igpc.com/>

Neofila. Modern issues from Russia, Eastern Europe, and Baltic States. Also includes some African countries.

<http://www.neofila.com/>

Stamp Collection. On-line postage stamp catalogue of worldwide issues. Includes production information.

<http://colnect.com/en/stamps/countries>

Stamperija. Listings and illustrations of thematic issues from countries located in Africa, Asia, and Oceania produced by Stamperija, Ltd., under contract to several postal administrations. Requires registration, login.

<http://www.stamperija.eu/>

Stamp World. Listings and illustrations of issues from all countries by year. Includes production information. Requires free registration and login.

<http://www.stampworld.com/en/maps/Europe/>

Virtual Stamp Club. Latest news from the world of stamp collecting. Links to other stamp collecting sites and the websites of almost every other collector society or major club.

<http://www.virtualstampclub.com/>

Zillions of Stamps. Worldwide listings and illustrations of stamps for sale.

<http://www.zillionsofstamps.com/>

GENERAL

American Philatelic Society. Listings of dealers, local clubs, stamp shows, and other philatelic events.

<http://stamps.org/>

American Topical Association. Topical collecting and exhibiting information, youth activities, checklists.

<http://www.americantopicalassn.org/home.shtml>

Collect 4 All. Listings of stamps for sale by country and theme. Includes spectrum of animal stamps.

<http://www.collect4all.com/>

Exploring Stamps. Interesting and professional videos produced by videographer Graham Beck on all sorts of stamp collecting topics.

<https://www.youtube.com/channel/UCkeSM6aOWfaUPIGb5rPOGyA>

The Philatelist. A blog by a philatelic journalist in Portugal. Displayed in several selectable languages. Contains current philatelic news stories and links to archives with past stories. Also includes links to dozens of other world-wide philatelic websites. Philatelic publication reviews.

<http://o-filatelistas.blogspot.com/>

Tree of Life Web Project. Worldwide collaborative effort to map the genome of every organism on earth and to establish their relationships to one another.

<http://www.tolweb.org/tree>

Zip Code Zoo. Links to taxonomic identification for all areas of biology including both zoology and botany. They claim to have a page for every living species with photos for many.

<http://zipcodezoo.com/>

BOTANY

Fungal Biodiversity Institute. Dutch site under the Royal Netherlands Academy of Science and Arts dealing with the taxonomy and evolution of fungi. Includes searchable taxonomic databases.

<http://www.cbs.knaw.nl/>

Garden Guides. Replacement site for *www.botany.com*. All kinds of information about plants including cultivation. Listings by common name or scientific name. Grouped by plant types.

<http://www.gardenguides.com/>

International Association for Plant Taxonomy. Links for the standard international codes on taxonomy and nomenclature for algae, fungi, and plants.

<http://www.iapt-taxon.org/nomen/main.php>

ENTOMOLOGY:

Antbase. On-line databases maintained by the American Museum of Natural History and Ohio State University listing all the ant species of the world.

<http://www.antbase.org/index.htm>

Australian National Insect Collection. Listings of Common and Scientific Names, systematic listing, and author abbreviations.

<http://www.ces.csiro.au/aicn/intro.htm>

Bug Guide. Identification, images, and information for insects, spiders, and their kin for the United States and Canada.

<https://bugguide.net/node/view/15740>

Cerambycidae. Species listing and illustrations of Cerambycidae of the West Palearctic Region organized by subfamily and tribe.

<http://www.cerambyx.uochb.cz/>

Entomological Data Information System. Internet links to many worldwide websites dealing with biology and ecology, especially Lepidoptera.

<http://www.insects-online.de/linkfram.htm>

Entomology Today. Entomological Society of America site reporting interesting discoveries in insect science, entomological society news and events, and related articles.

<https://entomologytoday.org/>

FUNET. Finnish university share network site containing updated taxonomic listings for insects, especially Lepidoptera. It also has limited listings for mammals, birds, and plants.

<http://www.nic.funet.fi/pub/sci/bio/life/intro.html>

Natural History Museum. British site containing Lepidoptera generic names and type species listings.

<http://www.nhm.ac.uk/our-science/data/butmoth/>

Odonata Society. German site containing listings of Odonata species found in Europe (in German).

<http://www.libellula.org/>

World Bee Genera. UC Riverside site containing listing of all bee generic names and synonyms by family and subfamily current as of September 2007.

<http://cache.ucr.edu/~heraty/beepage.html>

HERPETOLOGY:

AmphibiaWeb. Provides access to information on amphibian declines, conservation, natural history, and taxonomy. Includes an on-line database of species and links to many related sites.

<http://amphibiaweb.org/index.html>

The Reptile Database. Uetz, P. (Ed.). Taxonomic database that provides basic information about all living reptile species, such as turtles, snakes, lizards, and crocodiles, as well as tuataras and amphisbaenians. It does not include dinosaurs.

<http://reptile-database.reptarium.cz/>

Society of the Study of Amphibians and Reptiles. Website devoted to herpetology research and conservation. Database of North American species names.

<https://ssarherps.org/>

Turtle Meter Stamps. Updated website containing a worldwide catalog of meter stamps and meter marks the depict turtles and tortoises based on the owners collection of more than 220 items. There is an image of each meter with some short comments on its use and scarcity in English, Italian, and French.

<http://turtlemeterstamp.altervista.org/>

World-Wide List of Turtles and Tortoises on Stamps. This on-line listing was produced by Donald N. Riemer, a former member of the Biology Unit and contributor to this journal, who passed away in June 2012. The site contains a checklist of stamps by country along with appendixes listing labels, cinderellas, turtle look-alike stamps, and post offices with “turtle” or “tortoise” in their name.

<http://www.personal.psu.edu/crr2/turtstmp/>

ICHTHYOLOGY

All Tropical Fish. Provides information on marine fishkeeping, corals, invertebrates and freshwater fish. Offers fish forums, community and article and photo upload.

<http://www.alltropicalfish.com/>

Burke Museum Ichthyology. Database of the museum’s archival collection of more than 11 million specimens.

<http://www.burkemuseum.org/research-and-collections/ichthyology>

FishBase. A searchable database developed at the WorldFish Center in Taiwan in collaboration with the Food and Agriculture Organization of the United Nations. Contains all you ever wanted to know about fishes.

http://fishbase.sinica.edu.tw/home_tw.htm

MAMMALS

Feline Philately Homepage. All sorts of cat stamps, postmarks, and related articles.

<http://www.catstamps.org/>

Mammal Species of the World. On-line database of worldwide mammal species hosted by the Smithsonian National Museum of Natural History.

<http://vertebrates.si.edu/mammals/index.html>

ORNITHOLOGY

Birds of the World. All sorts of bird stamps by country and species, including new issues.

<http://www.bird-stamps.org/>

Bird Stamp Society. Website of an organization catering to collectors of bird stamps. They publish a quarterly journal that lists new birds on stamps.

<http://www.birdstampsociety.org/index.html>

Theme Birds on Stamps. All sorts of bird stamps by country and species, including new issues.

<http://www.birdtheme.org/>

PALEONTOLOGY:

Dinosaur Illustrations. Galleries of dinosaur illustrations by species. Includes links to paleontology stamp sites and other related sites.

<http://www.search4dinosaurs.com/>

Paleophilatelie. Edited by our Paleontology Editor, Michael Kogan. Catalogue of Paleontology related philatelic items, such as paleontologists, fossils, prehistoric animals, dinosaurs, early man, and museums on official post stamps, envelopes, and post cards. Contains links to related news items and sites.

<http://www.paleophilatelie.eu/index.html>

GLOSSARY OF TERMS

This section lists the definitions of acronyms, abbreviations, and code letters used throughout this journal. This listing does not include abbreviations used for the name of a taxonomic author, or commonly used symbols.

Checklist Codes:

| | | | |
|-----|--|---|---|
| Br | Branch | A | Subject is the primary design element |
| Fl | Flowers (with or without other plant parts) | B | Subject is only part of the main design |
| Fr | Fruit (including seeds, nuts, grains, etc.) | C | Subject is a minor representation |
| FrV | Grain head with sheaf or stalk | G | Subject is a generalized depiction |
| L | Lichen | R | Related subject (e.g., scientist, equipment) |
| M | Mushroom or fungus | S | Subject is a stylized or symbolic depiction |
| T | Trees (without flowers or fruit) | U | Subject is unidentified or unidentifiable |
| V | Various (vines, vegetables, roots, leaves, etc.) | X | Subject is a lookalike (e.g., mushroom cloud) |
| Wr | Wreath | Z | Subject is in the Margin or selva |
| Wr* | Head wreath (or chaplet) | * | Subject is natural color (no longer in use) |

Acronyms and Abbreviations:

| | | | |
|--------|---|-------|--------------------------------------|
| AAPE | American Association of Philatelic Exhibitors | ovpt | overprinted |
| anniv | anniversary | perf | perforated |
| APC | American Philatelic Center (Bellefonte, PA) | photo | photogravure |
| APS | American Philatelic Society | ptg | painting or artwork |
| ATA | American Topical Association | R | right position indicator |
| bkl | booklet | s/a | self-adhesive |
| Cap | captioned | Sc# | Scott Catalogue number |
| CTO | canceled to order | s-o-s | stamp on stamp |
| CTR | center position indicator | sp. | species |
| DS | deluxe sheet | SS | souvenir sheet |
| Ed. | Editor | ssp. | sub-species |
| Expo | Exposition | s/t | se-tenant |
| horiz | horizontal orientation | surch | surcharged |
| imperf | imperfurate | UL | upper left position indicator |
| inscr | inscribed | unwmk | un-watermarked |
| Intl. | International | UPU | Universal Postal Union |
| L | left position indicator | UR | upper right position indicator |
| litho | lithography | US | United States |
| LL | lower left position indicator | USPOD | United States Post Office Department |
| LR | lower right position indicator | USPS | United States Postal Service |
| Mi# | Michel Catalog number | var. | variety |
| mm | millimeter | vert | vertical orientation |
| MS | miniature sheet | Vol | Volume |
| ML | middle left position indicator | wmk | watermarked |
| MR | middle right position indicator | WWF | World Wildlife Federation |
| N/A | not applicable (or not available) | Yv# | Yvert & Tellier Catalog number |
| nd | non-denominated | ♂ | male symbol |
| NTSS | National Topical Stamp Show | ♀ | female symbol |
| NWF | National Wildlife Federation | ☠ | poisonous/venomous symbol |

Entomology Family Abbreviations:

| | | | | | |
|------|-------------------|------|------------------|------|-----------------|
| ACR | Acrididae | AES | Aeshnidae | AND | Andrenidae |
| ANO | Anobiidae | ANT | Anthicidae | API | Apidae |
| ARC | Arctiidae | BEL | Belostomatidae | BLA | Blattidae |
| BRA | Brahmaeidae | BRAC | Braconidae | BUP | Buprestidae |
| CAL | Calopterygidae | CAN | Cantharidae | CAR | Carabidae |
| CAS | Castniidae | CER | Cerambycidae | CHR | Chrysomelidae |
| CHRY | Chrysopidae | CIC | Cicadellidae | CICA | Cicadidae |
| COC | Coccinellidae | COE | Coenagrionidae | COR | Corydalidae |
| CORD | Cordulegastridae | CORE | Coreidae | COS | Cosmopterigidae |
| CRA | Crabronidae | CRAM | Crambidae | CUL | Culicidae |
| CUR | Curculionidae | DER | Dermestidae | DRO | Drosophilidae |
| DYT | Dytiscidae | ELA | Elateridae | FOR | Formicidae |
| FUL | Fulgoridae | GEO | Geometridae | GEOT | Geotrupidae |
| GOM | Gomphidae | GRA | Gracillariidae | GRY | Gryllidae |
| GRYA | Gryllacrididae | HAL | Halictidae | HES | Hesperiidae |
| HYM | Hymenopodidae | ICH | Ichneumonidae | LAM | Lampyridae |
| LAS | Lasiocampidae | LIB | Libellulidae | LIM | Limacodidae |
| LUC | Lucanidae | LYC | Lycaenidae | LYG | Lygaeidae |
| LYM | Lymantriidae | MAN | Mantidae | MEG | Megachilidae |
| MEL | Meloidae | MEM | Membracidae | MIR | Miridae |
| MUS | Muscidae | MYR | Myrmeleontidae | NOC | Noctuidae |
| NOL | Nolidae | NOT | Notodontidae | NYM | Nymphalidae |
| OEC | Oecophoridae | PAP | Papilionidae | PAS | Passalidae |
| PEN | Pentatomidae | PHA | Phasmatidae | PHY | Phyllidae |
| PIE | Pieridae | PLU | Plutellidae | POM | Pompilidae |
| PSY | Psychodidae | PTE | Pterophoridae | PYR | Pyalidae |
| PYRG | Pyrgomorphidae | RAP | Rhaphidophoridae | RED | Reduviidae |
| RIO | Riodinidae | ROM | Romaleidae | SAR | Sarcophagidae |
| SAT | Saturniidae | SCA | Scarabaeidae | SCO | Scoliidae |
| SCU | Scutelleridae | SES | Sesiidae | SIL | Silphidae |
| SIM | Simuliidae | SIR | Siricidae | SPH | Sphingidae |
| SPHE | Sphecidae | STA | Staphylinidae | SYR | Syrphidae |
| TAB | Tabanidae | TEN | Tenebrionidae | TEP | Tephritidae |
| TET | Tettigoniidae | TIP | Tipulidae | TOR | Tortricidae |
| TRI | Trichogrammatidae | URA | Uraniidae | VES | Vespidae |
| YPO | Yponomeutidae | ZYG | Zygaenidae | | |

Collecting Codes

| | | | | |
|----------------|-----------------|-----------|-----------|-----------------------|
| 0 Paleontology | 1 Flora & Fauna | 2 Botany | 3 Zoology | 4 Reptile & Amphibian |
| 5 Birds | 6 Fish | 7 Insects | 8 Mammals | 9 Marine Life |

INDEX TO VOLUMES 66 & 67**BOTANY****Botanical New Issues**

- Botany, C. Dahle 68:17,97,181,249
 Fungi, P. Mistretta 68:30,111,258

Flora (mixed phyla/classes regional)

- Joshua Tree Stamp US 2019 68:79
 Winter Berries Forever Stamps US 2019 68:90

Flowers

- Cactus Flowers Stamps US 2019 68:24
 Embroidered Flowers Austria 2005–16 68:254

Fruit

- Sour Fruit Stamps Malaysia 2019 68:185

Fungi

- Mushroom Art Universe of Taylor Lockwood,
 S. Brandt 68:16
 Mushroom Stamps Serbia 2019 68:112
 Lichen Stamps Belarus 2019 68:186
 New Plants in Philatelic Herbarium,
 C. Dahle 68:25,107,187,255

ZOOLOGY**Amphibians**

- Frog Forever Stamps US 2019 68:90
 Animal Quiz, K. Fisher 68:248

Birds

- Birds of Prey Stamps Great Britain 2019 68:118
 Clements 2019 List, Braun & Congrove 68:283
 Columbia Wildlife Refuge, L. Foster 68:106
 Europa Birds Stamps Moldova 2019 68:288
 Europa's Birdsongs Guernsey 2019 68:54
 Grouse Stamp Montenegro 2019 68:144
 Illustrated Postal Card 68:262
 Kingfisher Stamps Czech Rep. 2019 68:137
 New Penguin Society Logo 68:170

Fauna (mixed phyla/classes regional)

- Aquatic Fauna Stamps Belarus 2019 68:151

Fish

- Aquatic Life Stamps China P.R. 2019 68:64
 Antarctic Horsefish Stamp F.S.A.T. 2019 68:219
 Book Review: *The World of Prehistoric
 Fishes and their Reflection in Philately* 68:243
 How Many?, Natan Slifkin 68:7

Insects

- Emperor's Butterflies & Moths,
 V. Kachan 68:245
 The Delicate Beauty of Butterflies,
 V. Kachan 68:91

Invertebrates

- Coral Reef Stamps, US 2019 68:61

Mammals

- Baby Animals Stamps Germany 2019 68:34
 Bear Stamps Canada 2019 68:196
 Cats on Stamps Unit Featured 68:170
 The Puma Seen Through Maximum Cards,
 T. Watson 68:11

New Birds in Philatelic Aviary,

- C. Braun 68:49,138,208,278

PaleontologyBook Review: *The World of Prehistoric*

- Fishes and their Reflection in Philately* 68:243

Dinosaur Stamps US 2019 68:159

- T. rex* Cancells, M. Kogan 68:311

Reptiles

Endangered Turtle Stamps Canada 2019... 68:212

- Rock Lizard Stamp Montenegro 2019 68:295

Zoological New Issues

Entomology, D. Wright & J. Reis 68:65,152,221

- 68:301

Herpetology, R. Roman 68:55,289

Ichthyology, J.D. Shively 68:62,147,215,298

Invertebrates, I. Hunter 68:59,145,213,296

Mammalia, M. Prince 68:31,113,191,259

Ornithology, G. Mertz 68:35,121,197,263

Paleontology, M. Kogan 68:73,156,226,307

GENERAL

APS Summer Seminar Announcement 68:3

APS Summer Seminar Report, J. Congrove .. 68:179

Associate Editors Wanted 68:239

ATA News

ATA Cachets 68:89

ATA Checklists 68:89,166

ATA Elections 68:89

ATA Executive Director Retiring 68:88

New ATA Executive Director 68:169

ATA Privacy Policy 68:171

Awards (see also Exhibiting)

Biology Unit Websites Awards 68:3

DTP Announcement (Devine) 68:88

DTP Nominations 68:6

Paleophilately Website Award 68:79

Biology Reference Websites 68:80,160,232,315

Biology Unit Elections 68:167

Biology Unit History 68:220

Biology Unit Meeting Announcement 68:3,87

Biophilately Distribution 68:168**Book Reviews***Foundations of Thematic Philately* 68:169*The World of Prehistoric Fishes and their*

- Reflection in Philately, Peter J. Voice* 68:243

Checklist, Holiday 68:240

Discount Card 68:240

DTP Announcement (Devine) 68:88

DTP Nominations 68:6

Dues Reminder 68:3

Editor's Desk 68:1,85,165,237

Election Announcement 68:167

Election Results 68:239

Event Calendar 68:6

Exhibits

BU Spare Time Exhibit 68:9,95,177

NTSS 2020 Exhibits 68:220

| | |
|---|-------------------|
| Glossary of Terms and Symbols . | 68:83,163,235,318 |
| Holiday Checklist | 68:240 |
| Index | 68:320 |
| In Memoriam (Closed Albums/Deceased Members) | |
| Beatrice R. Vogel | 68:4 |
| Letters | 68:220 |
| Membership Drops | 68:167 |
| New Members/Reinstatements | 68:3,87,167,239 |
| News of Note | |
| ATA Cachets | 68:89 |
| ATA Checklists | 68:89,166 |
| ATA Elections | 68:89 |
| ATA Executive Director Retiring | 68:88 |
| ATA Privacy Policy | 68:171,220 |
| Biology Unit Featured by APS | 68:169 |
| Biology Unit Websites Awards | 68:3 |
| Bogus Stamps | 68:171 |
| Cats on Stamps Unit Featured | 68:170 |
| Discount Card | 68:240 |
| Holiday Checklist | 68:240 |
| New ATA Executive Director | 68:169 |
| New ATA Headquarters | 68:240 |
| New Penguin Society Logo | 68:170 |
| NTSS 2019 Announcement | 68:87 |
| October Stamp Collecting Month | 68:170 |
| Prayer of a 17th Century Nun | 68:4 |
| NTSS 2019 Announcement, J. Congrove | 68:5,87 |
| NTSS 2019 Report, J. Congrove | 68:172 |
| A Poem, D. Wright | 68:5 |
| President's Message | 68:2,86,166,238 |
| Privacy Policy | 68:171,220 |
| Reprints | |
| How Many?, Natan Slifkin | 68:7 |
| Scott Catalogue Listings, G. Mertz | 68:47 |
| Secretary's Report | 68:3,87,167,239 |
| Stamp Stories | |
| BU Spare Time Exhibit | 68:9,95,177,241 |
| Treasurer Report | 68:168 |

AUTHORS

| | |
|---------------------------------------|---|
| Braun, Charles E. (BU1364) . | 68:49,138,208,278,283 |
| Brandt, Stephen C. (N/A) | 68:16 |
| Congrove, Jack R. (BU1424) | 68:1,3-6,9,24,34,54 |
| | 68:64,79,80,85,87-90,95,112,118,137,144,151 |
| | 68:165,169,172,177,179,185,186,196,212,219 |
| | 68:220,237,240-41,254,262,283,288,295 |
| Dahle, Christopher E. (BU1269) | 68:3,17,25,87,97 |
| | 68:107,167,168,181,187,239,249,255 |
| Fisher, Ken (N/A) | 68:248 |
| Foster, Lisa D. (N/A) | 68:106 |
| Hunter, Ian (BU1619) | 68:59,145,213,296 |
| Kachan, Vladimir (N/A) | 68:91,245 |
| Kogan, Michael (BU1863) | 68:73,79,156,226,307 |
| Mertz, Glenn G. (BU1455) | 68:35,47,121,197,263 |
| Mistretta, Dr. Paul A. (BU1681) | 68:30,111,258 |
| Prince, Michael J. (LM68) | 68:31,113,191,259 |
| Reis, José | 68:65,152,221,301 |
| Roman, Richard A. (LM83) | 68:55,289 |
| Ryan, Laurie J. (BU1719) | 68:2,86,166,238 |
| Shively, J. Dale (BU1832) | 68:62,147,215,298 |
| Slifkin, Dr. Natan (N/A) | 68:7 |
| Voice, Dr. Peter J. (N/A) | 68:243 |
| Watson, Terry (N/A) | 68:11 |
| Wright, Donald P., Jr. (BU243) | 68:5,65,152 |
| | 68:221,301 |