BIOPHILATELY

OFFICIAL JOURNAL OF THE BIOLOGY UNIT OF ATA

MARCH 2021 VOLUME 70 NUMBER 1

Slime Molds: Plant or Animal? Neither.

"Urgh!!! There is something that looks like dog vomit on my mulched flower bed!!!"

It's Our Birthday!! We turn 70 this year!

IN THIS ISSUE

NEW ISSUES

ARTICLES:

The Biology Unit, founded in 1951, is a study unit of the American Topical Association dedicated to the international cooperative study of biological postage stamps and related material.

Electronic versions of back copies of Biophilately are available on our website, or from the Librarian on request. Please contact the individual associate editors if you have queries about the content of their columns.

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

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 editor will handle requests for issues from the current year. Contact the librarian (address above) for copies of all other issues.

PLEASE NOTE: Material for the next issue should be in the hands of the editor before 15 May 2021.

FROM THE INTERIM EDITOR'S DESK

Chris Dahle, BU 1269

Happy 70th Birthday! The Biology Unit is one of the oldest Study Units of the American Topical Association. The ATA marked its 70th birthday in 2019 with celebrations at the joint show with the American Philatelic Society that Augusts. Now it's our turn. Maybe some of our members would like to organize a celebration for the Unit at the Great American Stamp Show which may be held in Chicago (at the Donald E. Stephens Convention Center, Rosemont), August 12-15. Additional decisions about the show are expected by the end of March according to news releases from the American Philatelic Society and the American Topical Association. See more in the News of Note section on page 3.

Are there any collectors of Marine Invertebrates still in the Unit? If there are, would you be interested in becoming the Associate Editor for us? We have not had a column on Marine Invertebrates since Ian Hunter bowed out some time ago. While I am asking for volunteers, I would be happy to hand over the job of Editor to someone new.

If you can stand more time in front of your computer, there are wonderful opportunities for expanding your philatelic knowledge and interests with seminars from the APS and the ATA among others. In January, the ATA had a series called "Warm Up to Topicals." These lectures will be available to view after the fact if indeed you missed them. The APS is offering summer courses online rather than in person this year. These courses will have a fee associated with them, with a discount for APS members. A schedule of courses will be posted on the APS web site by March 1. And the APS Philatelic Library has been open to all collectors since the beginning of the pandemic.

As web master, I have been using Adobe Dreamweaver CS4 to edit and post *Biophilately* on the internet. The software makes it easy to make changes and post content. Unfortunately, in November I had to buy a new computer after my 10-year old one died. And the old software is not compatible with the operating system on the new computer. Adobe now sells the software by subscription, which we have bought at a discount. But it does involve a $21 monthly fee, which was approved by the Board of Directors. To offset this loss in revenue, it looks like we will have to increase the dues for the digital version of Biophilately to $20 per year. The Board of Directors has not been asked to address this proposition yet.

One of the advantages of the digital subscription is that you get the images in full color. With the new publisher we could also print the journal in color, but it would mean an increase in the cost. I do not know the numbers at this point to estimate the increase in dues for all members. Please send your comments to me at chris-dahle@biophilately.org.

DUES RATES (US$)	**ADVERTISING RATES**
US membership $25	Full page insertion $20
Canada membership $30	Half page insertion $10
Worldwide membership $45	Quarter page insertion $5
On-line membership $15	

Please see the Biology Unit web site (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 Dr NE, Cedar Rapids, IA 52402

PRESIDENT'S MESSAGE

I hope this day finds everyone well. It has certainly been a very trying year. And as yet, the end is still in the distant future. Seems so many people are fed up with restrictions, business shutdowns and unemployment. People have feelings of isolation, depression, or despair. After a while movies and cleaning become very old.

For me, my stamps have been a saving grace. I have not been able to attend stamp shows, as they seem to get cancelled on a regular basis. Luckily, I have found a number of online dealers to buy from. Often, I will grab an album off the shelf, curl up with a cup of tea, and for a while, become lost in another world. I can go back in history, visit another country, or hang out with a favorite animal. I just visited Sumatra, land of elephants, tigers, orangutangs, and my favorite, the smallest of the rhinos. Recently I have been looking for covers, maxi cards and cancels. There are so many animal towns around the world. Did you know in the US there is a Newt, KY or Eagle, MI or Fox, IL or Beaver, PA and of course Hedgehog, WI?

Another outlet has been the Zoom talks offered by the ATA. This has been a chance to see friends, get to know new people and share interests of other collectors. I feel less isolated after the talks. I encourage you to join the next presentation or even to present a talk yourself.

Stay safe, stay warm and wear those masks

SECRETARY'S CORNER

The Biology Unit currently has 102 members. Within the last year we have lost 25 members. Three of those were by request. Two were deceased. The remainder were dropped after hearing no response from them.

A large proportion of our members are also members of the ATA. 62 are members of both.

Renew Your Membership

Membership renewals follow the calendar year, which means you need to renew at the beginning of the year. Please renew your membership now if you have not already done so. A renewal form was mailed in the December issue of *Biophilately*. You can also find one on the web site, biophilately.org.

New member

William Workman BU#1908 Hatboro, PA collects Birds (especially kingfishers, woodpeckers, auks, cormorants, gannets, diving birds).

NEWS OF NOTE

CALL FOR A NEW BUTTERFLY & MOTH CHECKLIST

"The 2016 edition of Butterfly and Moth Motifs is now available. This expanded two-volume reference is the tenth edition of this popular checklist. Altogether it contains almost 20,000 entries.

"The butterfly topic continues to be very popular among collectors and stamp issuing authorities are taking full advantage of this to produce great varieties of stamps and souvenir sheets with this theme. This checklist contains a more extensive listing than those found in any other single reference.

"It has a country-by-country list of postage stamps with butterfly and moth designs. It includes entries for all identifiable lepidopteran species, as well as stylized designs and drawings.

In addition, it includes an updated systematic listing that incorporates recent taxonomic revisions based on advances in DNA testing.

"The cost for this spiral-bound edition is $50 for US orders. ..."

This is the notice that Jack Congrove put in *Biophilately* in 2016. Recently Steve Kavalecs contacted the interim editor asking about updating Jack's book. Unfortunately I do not know anything more about it. I do not know if Jack was planning to do an update, or if he had started work on one. I have tried to get in touch with Jack's sister to see if she is able to retrieve files from Jack's computer, but have not heard back from her. If anyone knows anything about it or is interested in working on an update, please contact the interim editor at chris-dahle@biophilately.org.

The Great American Stamp Show, August 12-15 2021

Here is the latest information from the American Philatelic Society Executive Director Scott English about plans for the August show. This was sent out on February 15, 2021 in the online APS Newsletter.

> **Planning and Hopin**g
> We have been communicating with local officials and Convention Center staff to prepare as best we can. Several spring events at the Stephens Center are being rebooked for later in the summer and fall. Officially, Convention Center staff "hope to be operational by the summer." The reality is the Great American Stamp Show lands in the gray area between continued restrictions and some return to normalcy. The APS, ATA, and AFDCS have been planning in earnest.
>
> The World Series of Philately landscape has shifted to schedule for the second half of the year. A few shows typically held in the spring have announced or are looking to firm up a show in August or later. Unfortunately, others will cancel or be limited to bourse only for 2021, with plans of coming back with a full exhibition in 2022.
>
> **Not Your Average Stamp Show**
> For those who have attended a Great American Stamp Show in years past, you know, this is not your average stamp show. It is the most significant national show every year. We have a responsibility for the show to be financially viable for dealers and the APS. To accomplish that, we must draw 130 dealers, 3,000 or more visitors, and maintain whatever health and safety restrictions required to operate the show. Even in a usual year, this is no small undertaking, but it will be a challenge with the pandemic's everchanging world.
>
> We hope to bring all the events that make our stamp shows memorable for collectors and non-collectors alike. But if we're able to proceed, we are already anticipating changes to certain functions, particularly the dinners and seminars where close spacing may not be allowed.
>
> To be able to meet the needs of the show, there is a decision point. In this case, we will make a firm decision by the end of March based on the best available information and guidance from folks in Illinois.

Slime Molds: Is this a First?

By Christopher Dahle BU 1269

When I first saw the stamps I thought for sure it was first. Belarus issued a set of three stamps on April 6, 2020 of colorful globules on a slim stalk with a dark background (Scott #1173-1175a). But I was wrong. Previously, the Comoro Islands had issued a stamp with a Slime Mold, Scott #811 in 1994 (Figure 1). The miniature sheet of 9 included flowers, fruit fungi and *Lycogala epidendrum*, Wolf's Milk Slime, a slime mold.

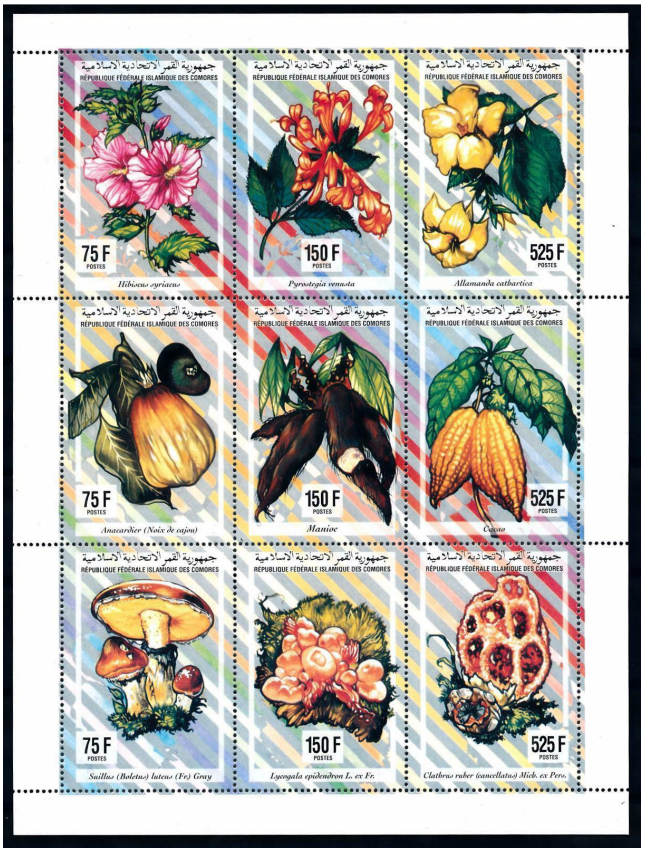

Figure 1: *Lycogala epidendrum* on Comoro Islands Scott #811. The 150 F stamp is at the bottom of the center column of the minisheet.

Slim molds are strange organisms. They are classified in the kingdom Protista because they have characteristics that do not fit the animal or plant kingdoms. They are eukaryotes because they have a cell membrane, nucleus and organelles. There are three kinds of slime molds. The plasmodium form, Myxomycetes, has acellular cytoplasm with thousands of nuclei which are haploid. Plasmodia move, slowly, at 1.35 mm per second, and can become quite large, up to 30 cm in diameter and 3-5 cm thick. There are 888 known species. A second group, Dictyostelids, is cellular, amoeboid in nature with a single nucleus, that aggregates with chemical stimuli. This is a much smaller group with only 89 species. The Protostelids are also amoeboid with only 45 species known.. All three types engulf bacteria for food and form fruiting bodies called sporocarps. Sporocarps are only millimeters in diameter and the stalks, or stipes have millimeter dimensions. Fruiting bodies can be globular, plumed or other shapes. They can be solitary or clustered. The spores produced contain cellulose, unlike fungi which produce similar spore producing bodies. Spores from different mating strains germinate and fuse creating a diploid zygote, which undergoes nuclear division to form a multinucleate plasmodium. Under adverse conditions they form macrocysts in a structure called a sclerotium.

Figure 2: *Lycogala epidendrum* Scott #811f

Slime molds are generally cosmopolitan though some are restricted to tropical, subtropical or temperate areas. They are found in rotting vegetation and dung. Identification is usually made by collecting in the field and growing them on agar plates in a lab.

Lycogala epidendrum is also know by the common names of wolf's milk slime and toothpaste slime. It is a myxomycete in the Retulariaceae. The plasmodium is pinkish and has a paste-like consistency. The fruiting bodies are 3-15 mm in diameter, variable or bright red in color and sessile. As the sporocarp matures it turns yellow-brown and the spores are pinkish-gray (Figure 2: Scott # 811f).

Arcyria globosa is a myxomycete in the family Arcyriaceae. Sporangia globose, 0.36-0.40 mm in diameter, beige. Stalk dark, yellowish by transmitted light, up to 0.32 mm long. Found on bark of trees or dead leaves. South and North America, Europe, Africa and Asia. (Figure 3 Scott # 1173)

Figure 3: *Arcyria globosa* on Belarus Scott #1173.

Figure 4: *Cribraria purpurea* on Belarus Scott #1174.

Cribraria purpurea is a myxomycete in the family Cribrariaceae. Plasmodium red-purple, becoming scarlet before sporulation. Sporocarp 0.6-1 mm diameter, erect with stalk 1.5-2.5 mm purple-red, reddish-purple to purplish-pink. Found on rotten wood. In Japan restricted to sub-alpine forests. (Figure 4 Scott #1174).

Physarum album is a myxomycete in the family Physaraceae. Common name is many-headed slime. Plasmodium is white or gray. White sporangia are gregarious 1-1.5 mm, erect or nodding, globose or lenticular, contain lime deposits. Stalk yellow, olivaceous or black, tapering, wrinkled. Found on decayed logs and dead trees. Cosmopolitan. (Figure 5 Scott #1175).

Figure 5: *Physarum album* on Belarus Scott #1175.

Figure 6: Souvenir sheet of 3, Comoro Islands Scott #811l, with *Lycogala epidendrum* in the center.

Comoro Islands Scott #811f was issued in a miniature sheet of 9 (Figure 1) and a souvenir sheet of three Scott # 811l (fFtigure 6). Scott 811 was overprinted and surcharged to 200 fr (Scott #826Fi) in 1997-98 Figure 7. Detail of the overprint is shown in figure 8. There are two sizes of F on overprints on the 525 fr (Scott #811h-j). Most of the overprints were used locally and few mint copies are available.

Figure 8: Overprint on Comoro Islands Scott# 826F.

Varieties such as inverted or doubled overprints exist on some of the stamps overprinted at this time, but none have been described for Scott # 826Fi.

Figure 9: First Day Cover of Belarus Scott #1173-75.

Belarus Scott#1173-75 (Figure 9) were designed by Marina Yurchik from photographs by Yevgeniy Moroz. They are printed on chalk-surfaced gummed paper in sheets of 6 stamps. 36,000 of each duty were printed by multicolor offset by Republican Unitary Enterprise "Bobruisk Integrated Printing House named after A.T.Nepogodin". The stamps have an invisible security mark (Figure 10).

Figure 10: Security marks shown in white are present on the stamps from Belarus.

The cachet for the FDC was designed by Marina Yurchik, as was the cancel, which was applied at Post Office No.1 in Minsk (Figure 11).

Figure 11: FDC cancel on Belarus Scott #1173-75.

According to Bulletin #10 (861) from Belpochta, “Photos for the project were made by a research associate of the laboratory of mycology of the V. F. Kuprevich Institute of Experimental Botany of the NAS of Belarus Ye. iL. Moroz at the Centre for the collective use of scientific equipment "Cellular and molecular technologies for the study of plants and fungi" of the V. L. Komarov Botanical Institute of RAS with the support of Professor Yu. K.Novozhilov, Doctor of Biological Sciences.”

Figure 12: Souvenir sheet Belarus Scott # 1175a.

The souvenir sheet of 6 (Scott #1175a, Figure 12) is 123 x 90 mm and was printed in a quantity of 8,000. The face value of the non-denominated A stamps is 54k on the date of issue and is valid for domestic letters to 20 grams. The value for the N stamp is 1.32r and is valid on postcards sent abroad by surface mail. The H stamp is valued at 1.64r for surface letters to 20 g sent abroad.

Slime mold research has resulted in their use for modeling other biological and non-biological processes. Slime molds have been tested for “memory”. In an experiment by Broussard et al published in 2019, slime molds were habituated to sodium, which is a repellent. Allowed to go dormant, the slime mold retained the habituation after being revived. This is a type of non-neurological memory. In the search for food, slime molds reach out with a network of plasmodium. NASA is looking at slime mold networks as a model for the universe where dark matter ties parts of the universe together. Slime molds are being used to inspire soft bodied robots which mimic how slime molds move. Because they are somewhat like a large cell with many nuclei, they are being used to study biological processes like phagocytosis, cell division, intercellular communication, cell differentiation and morphogenesis.

And if you would like to see some great photos, go to this web site:

http://www.myxomycetes.net/Myxomycete_Beauty/

References: Accessed January16-17, 2021

General

https://herbarium.usu.edu/fun-with-fungi/slime-molds
https://ucmp.berkeley.edu/protista/slimemolds.html
https://plantclinic.tamu.edu/factsheets/slime-mold/
https://royalsocietypublishing.org/doi/10.1098/rstb.2018.0368
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https://botanyphoto.botanicalgarden.ubc.ca/2012/08/lycogala-epidendrum/

Stamps
http://www.comores-online.com/collections/philatelie/
https://belpost.by/en/philately/infolists/3054

Research
https://www.nasa.gov/feature/goddard/2020/slime-mold-simulations-used-to-map-dark-matter-holding-universe-together
https://www.kqed.org/science/635319/this-pulsating-slime-mold-comes-in-peace

Species Descriptions
Lycogala
https://www.discoverlife.org/mp/20q?search=Lycogala+epidendrum
https://www.messiah.edu/Oakes/fungi_on_wood//puffball%20and%20cushion/species%20pages/Lycogala%20epidendrum.htm
Arcyria
https://www.bcrc.firdi.org.tw/fungi/fungal_detail.jsp?id=FU200802090016
Cribraria
https://www.discoverlife.org/mp/20q?search=Cribraria+purpurea
https://www.mycoquebec.org/bas.php?trie=C&l=l&nom=Cribraria%20purpurea%20/%20Cribaire%20pourprée&tag=cribraria%20purpurea&gro=73
Physarum
http://www.hiddenforest.co.nz/slime/family/physaraceae/physa06.htm

Fossil Amphibia on Stamps

Peter Voice, PhD, BU 1891
Western Michigan University and Michigan Geological Survey

Amphibians are primitive tetrapods that are limited to moist habitats. Their skin is permeable and most modern amphibians lack scales (caecilians are an exception). Their eggs are covered in gelatinous material excreted by the female which is water permeable and restricts amphibians to reproducing in wet or moist environments. Modern amphibians spend their juvenile stage in water where they breathe with gills. During metamorphosis, in most species the juvenile develops lungs. Amphibians are ectotherms – they do not regulate their internal body temperature. With the cladistic revolution as well as new fossil discoveries, amphibian taxonomy is in a bit of disorder. Cowen's History of Life (Benton, 2020) subdivides the Amphibia (Figure 1) into the Batrachosaurs (including Temnospondyls and modern Lissamphibians), and Reptiliomorphs (Lepidospondyls and Anthracosaurs). There is also an increasingly diverse array of early tetrapods that are transitional between a sarcopterygian fish ancestor and true amphibians – these fossils are classified as tetrapodomorphs. Note that I will include Tetrapodomorphs as "Amphibians" in the sense that they are semi-aquatic tetrapods that likely spent some time on land and breathed air – though modern classification techniques would leave them as a paraphyletic taxa that is a sister group to the Class Amphibia. A variety of prehistoric amphibians have been exhibited on stamps (Table 1 and Figures 1 and 2) and other philatelic materials (Table 2 and Figures 3-6).

Tetrapodomorphs are known primarily from Late Devonian and Early Carboniferous rocks of what is now northern North America (Canada, Greenland, and Pennsylvania) and central Europe (Poland and western Russia). Some specimens have also been described from Australia and China. The far majority of the specimens are found in redbeds – sandstones deposited in riverine settings, suggesting a freshwater origin for this group. The classic tetrapodomorphs are *Ichthyostega* and *Acanthostega*, both found in rocks from Greenland. Both genera are found on stamps, with *Ichthyostega* being one of the commonest amphibians on stamps (Figure 3). These animals are still well adapted for life in water – but their bodies exhibit early adaptations that will be important later for their descendants including stronger pelvic and pectoral girdles. Another important adaptation is the choana. Most fish have two sets of nostrils – with one set adapted for ingoing water and the second set for the outgoing water (excurrent nostrils). In some early tetrapodomorphs, the excurrent nostrils migrate to a position on the edge of the mouth. In later tetrapodomorphs (and tetrapods), the excurrent nostrils are positioned inside the mouth forming the choana. Note that in mammals, the secondary palate separates the choana from the mouth – allowing us to breathe and eat at the same time!

Reptiliomorphs are also referred to as stem-amniotes and include amniotes (reptiles, birds and mammals) as well as some amphibians that are more closely related to the amniotes than they are to modern Lissamphibians. Amniotes lay specialized eggs that bear several adaptations including a hard shell, and two sacs – the amnion filled with nutrients used by the growing embryo and the allantois that collects the embryo's waste products. Reptiliomorphs include Lepospondyls and Anthracosaurs. The Lepospondyls all share spool-shaped vertebrae that grew as simple bony cylinders around the spinal cord. Most Lepospondyls lived during the Mississippian to Early Permian Periods – with one species found in Late Permian rocks of Morocco. Their range included North America, Europe and Morocco. *Diplocaulus* (see Gabon 1017j for example) is one example of a Lepospondyl shown on stamps. Anthracosaurs are another group that were common in the Mississippian to Early Permian Periods. Anthracosaurs used to

be called labyrinthodontids due to their really unique teeth. As their teeth grew, the dentin and enamel infolded. In cross-section, their teeth look like a labyrinth or maze. Unfortunately, labyrinthodont teeth are not a great character to use in classification – as Lepospondyls and Temnospondyls also exhibit these teeth. The most common Anthracosaur on stamps is *Seymouria*, a genus found in Early Permian rocks of North America (named for Seymour, Texas) and Europe. *Seymouria* was once considered an early reptile until tadpoles of a closely related genus *Discosauriscus* were discovered in the 1950's, showing that anthracosaurs had a larval stage like other amphibians.

The last group of Amphibians are the Batrachosaurs, which include all modern amphibians (the Lissamphibia) and the extinct Temnospondyls. Temnospondyls were an incredibly diverse group of labyrinthodontid amphibians that are found worldwide in rocks from Mississippian to Cretaceous in age. *Koolasuchus* (Australia 3986 and 3992) was one of the last known temnospondyls – as it lived in rift valleys in polar Australia during the Early Cretaceous. *Koolasuchus* was a quite large amphibian with estimates of its weight being 1,100 pounds! *Eryops* is probably the classic temnospondyl shown in many reconstructions of Early Permian terrestrial life – and has been shown on several stamps including the People's Republic of Benin 887 and Guyana 3667b. Lissamphibians include frogs (Figure 4), salamanders and caecilians. Several frogs are shown on stamps from Germany, Libya, and most recently in the 2020 Prehistoric Animals of Hungary issue (described in the June 2020 issue of Biophilately Magazine). A fossil salamander is shown on Switzerland B286 – the only semi-postal that I know of that shows a fossil amphibian (Figures 2 and 4).

Below is a checklist of fossil amphibia on stamps as well as pictures of relevant philatelic materials. Please note that due to space considerations not all issues (Table 1 and Figure 2) or philatelic materials (Table 2) are reproduced in this article.

Table 1: **Prehistoric Amphibians on stamps**

Country	Date	Denomination	Scott Catalogue #	Description
Australia	9-04-1997	45c	1615	*Paracyclotosaurus*
Australia	9-24-2013	60c	3986, 3992	*Koolasuchus*
People's Republic of Benin	8-30-1996	100fr	887	*Eryops*
Brazil	10--12-2014	1.30r	3285a	*Prionosuchus plummeri*
Cambodia (Kampuchea)	3-20-1986	80c	665	*Mastodonsaurus*
Central African Republic	12-15-2015	900fr		Fossil frog
People's Republic of Congo	8-20-1993	75fr	1043	*Ichthyostega*
Czechoslovakia	8-08-1968	60h	1560	*Paleobatrachus grandipes* (Giebel)

Table 1 Continued:

Fiji	8-15-2006	$1.50	1106	*Platymantis megabotoniviti**
Gabon	12-20-2000	500fr	1011	*Acanthostega*
Gabon	12-20-2000	260fr	1017c	*Acanthostega*
Gabon	12-20-2000	260fr	1017h	*Pholidogaster*
Gabon	12-20-2000	260fr	1017i	*Gerrothorax*
Gabon	12-20-2000	260fr	1017j	*Diplocaulus*
Gambia	2-06-1995	2d	1605k	*Giantoperis*
Gambia	8-01-1999	3d	2140j	*Cacops*
Gambia	8-01-1999	3d	2140k	*Ichthyostega*
German Democratic Republic	10-24-1978	35pf	1961	*Paleobatrachus diluvianus* (Wiederau)
Greenland	5-24-2008	20.50k	522	*Icthyostega stensioei*
Grenada Grenadines	4-15-1997	$1.50	1914f	*Platyhystrix*
Guinea-Bissau	11-12-2018	640fr		*Seymouria*
Guyana	3-10-1993	$30	2662j	*Cacops*
Guyana	10-15-2001	$100	3667a	*Ichthyostega*
Guyana	10-15-2001	$100	3667b	*Eryops*
Guyana	10-15-2001	$100	3667f	*Eogyrinus*
Hungary	3-04-2020	200f	4545a	*Hungarobatrachus*
Liberia	11-22-1999	$10		*Acanthostega*
Liberia	11-22-1999	$10		*Cacops*
Libya	3-01-1985	150d	1245	Fossil frog
Mozambique	4-30-2012	66m	2591a	*Ichthyostega*
Mozambique	4-30-2012	16m	2629e	*Peltobatrachus pustulatus*
Mozambique	6-15-2018	116m		*Diplocaulus*

Table 1 Conntinued:

Mozambique	4-10-2019	116m		*Seymouria*
Niafo'ou (Tongo)	8-01-1989	57s	117	Carboniferous era scene with insect and amphibian (Ichthyostega?)
Niafo'ou (Tongo)	11-17-1989	1pa	118	Carboniferous era scene with insect and amphibian (Ichthyostega?)
Nicaragua	1-16-1999	$6		*Thadeosaurus***
Niger	10-27-2000	475fr	1061a	*Palaeobatrachus*
Niger	10-27-2000	475fr	1062c	*Metoposaurus*
Niger	11-20-2017	800fr		*Ichthyostega* on land and *Tiktaalik* in water.
Poland	3-05-1966	40g	1397	*Ichthyostega*
Poland	3-05-1966	50g	1398	*Mastodonsaurus*
Sào Tomé and Principe	10-22-2019	31d		Fosssil frog
Sierra Leone	3-25-2016	24,000le	3704	*Diplocaulus*
Swwitzerland	6-01-1959	40c+1c	B286	*Andrias scheuchzeri*
Togo	5-11-2019	800fr		*Seymouria baylorensis*
North Vietnam	8-30-1984	2d	1432	*Seymouria*

*Fiji *Platmantis megabotoniviti* – this species died out in the Late Quaternary – shortly after people arrived on the islands. Most articles refer to subfossil material encased in cave limestone deposits. It is unclear when exactly the animal died out – so this stamp may be less desirable for people looking for prehistoric animals.

**Nicaragua *Thadeosaurus* stamp – van Eijden's website notes that this stamp actually shows *Crassigyrinus* instead of *Thadeosaurus*. *Thadeosaurus* is a diapsid reptile, while Crassigyrinus is a tetrapodomorph.

Table 2 – Other Philatelic Materials

Country	Year	Type	Description
Australia	1997	Maxi Card	Official maxi-cards were released for entire set showing fossils of the species.
Australia	2013	Maxi Cards	Official Maxi-cards were released for all issues in set – showing reconstructions of animals.
Benin	1996	Postmark	A special postmark for the first day issue for issues 884-889. Shows a stylized reconstruction of a Tetrapodomorph – likely *Crassigyrinus*.
Cenetral African Republic	12-03-1993	Margin of Souvenir Sheet	Bottom margin of Souvenir sheet (Scott 1020) shows a *Mastodonsaurus*.
Chad	3-27-2013	Margin of Souvenir Sheet	The 2017 issue of dimorphodon has a small *Diplocaulus* in the lower right corner of the souvenir sheet margin.
People's Republic of China	2003	Postal Card	Postal Card exhibits image of fossil frog.
People's Republic of China	2007	Postal Card	Exhibits image of fossil *Callobatrachus sanyensis*.
Germany	2002	Postmark	Postmark showing *Diadectes absitus* in honor of the Department of Geosciences and Geography at Goethe Universität in Frankfurt am Main. Note *Diadectes absitus* is now referred to as *Silvadectes absitus*.
Greenland	2008	Postmark, Maxi Card and FDC	Greenland Post issued official maxi-cards and FDC showing *Ichthyostega* for the 2008 issue of 521-523. Postmark shows a reconstruction of the skull of *Ichthyostega*.
Greenland	2009	Postmark	The 2008 postmark was updated for the 2009 fossils of Greenland issues (533-535).
Guinea	11-01-1997	Margin of Souvenir Sheet	Scott Catalog #1048 *Dimetrodon*, shows an *Eryops* in lower left margin of souvenir sheet.
Guinea	5-07-1988	Margin of Souvenir Sheet	Margin shows individuals of *Cacops* and *Ichthyostega* in lower left of sheet.
Guinea		Margin of Souvenir Sheet, overprinted with surcharge.	Margin shows individuals of *Cacops* and *Ichthyostega* in lower left of sheet. Note this is a reprint/overprinted version of the 1998 issue. Overprint reads 200th anniversary of Charles Darwin.
Guinea-Bissau		Margin of Souvenir Sheet	Margin of souvenir sheet exhibits an *Eryops*.

Table 2 Continued:

Guinea-Bissau	1-18-2016	Margin of Souvenir Sheet	Lower center margin of souvenir sheet shows a *Koolasuchus* resting on a log.
Niger	10-24-2018	Margin of Souvenir Sheet	Margin of Rhodocetus souvenir sheet shows *Diplocaulus* in lower right corner.
North korea	5-20-1999	Margin of Souvenir Sheet	Souvenir Sheet in honor of Charles Darwin's Birthday. Upper margin of Souvenir sheet has an *Eusthenopteron* in center and just below and to the left a line drawing of an *Ichthyostega*.
Switzerland	1959	Maxi Card	Maxicard with issue B286 shows *Andrias scheuchzeri* skeleton
Togo	2019	Margin of Souvenir Sheet	Margin of souvenir sheet shows an *Archegosaurus*.

Figure 1 (succeeding page): A phylogenetic tree for the Amphibia (after Benson, 2020) with representative stamps showing examples of the major groups (scans from Michael Kogan's paleophilatelie.eu webpage). *Eusthenopteron* (Poland 1396) is a Late Devonian sacropterygian fish thought to be closely related to Amphibians. *Ichthyostega* is a stem-tetrapod or tetrapodomorph from Greenland and has been commemorated on a number of stamps including Greenland 522. A fossil frog from Libya (Libya 1245) represents the *Lissamphibia*, the group that contains all modern Amphibians. *Eryops* is a temnospondyl from northern Texas and is shown on Benin 887. *Diplocaulus* (Gabon 1017j) is an example of the lepospondyls, more reptile-like amphibians. The Chinese postmark from 2006 from Michael's webpage shows a stylized cross-section through an amniotic egg – the feature that links reptiles, birds and mammals.

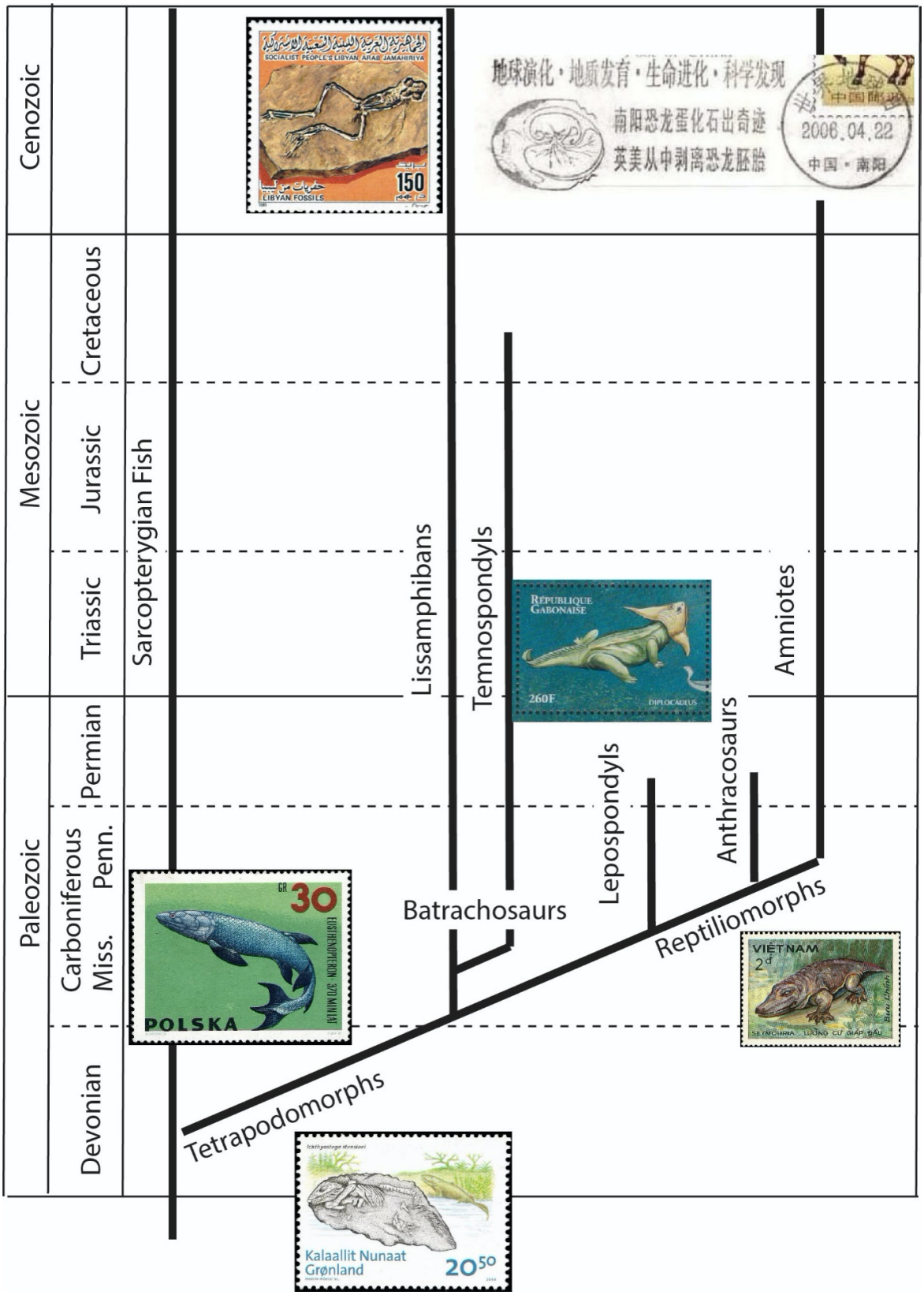

Cenozoic
Mesozoic
Paleozoic
Cretaceous
Jurassic
Triassic
Permian
Carboniferous Penn.
Miss.
Devonian
Sarcopterygian Fish
Lissamphibans
Temnospondyls
Amniotes
Batrachosaurs
Lepospondyls
Anthracosaurs
Reptiliomorphs
Tetrapodomorphs
SOCIALIST PEOPLE'S LIBYAN ARAB JAMAHIRIYA
LIBYAN FOSSILS
150
地球演化·地质发育·生命进化·科学发现
南阳恐龙蛋化石出奇迹
英美从中剥离恐龙胚胎
2006.04.22
中国·南阳
RÉPUBLIQUE GABONAISE
260F
DIPLOCAULUS
GR 30
POLSKA
VIET NAM
2d
SEYMOURIA - LUONG CU GIAP, BAU
Kalaallit Nunaat
Grønland
20 50

Figure 2: A selection of Stamps exhibiting fossil amphibians. Under each stamp is the country of origin and the Scott Catalogue number for that issue. Scans courtesy of Michael Kogan's paleophilatelie.eu.

Australia 1615

Australia 3986

Australia 3992

Brazil 3285a

DDR 1961

Cambodia 665

Czechoslovakia 1560

Hungary 4545a

Niafo'ou (Tongo) 118

Niger 1061a

Niger 1061c

Sierra Leone 3704

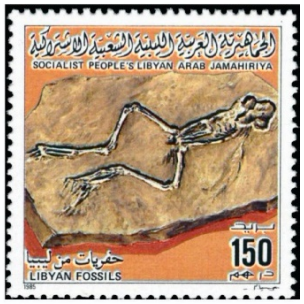
Poland 1397

Poland 1398

Switzerland B286

North Vietnam 1432

Greenland 522

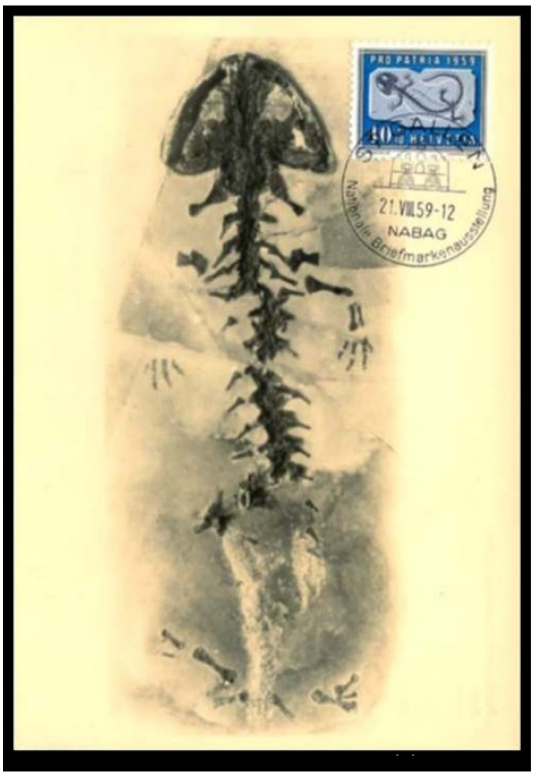


Libya 1245

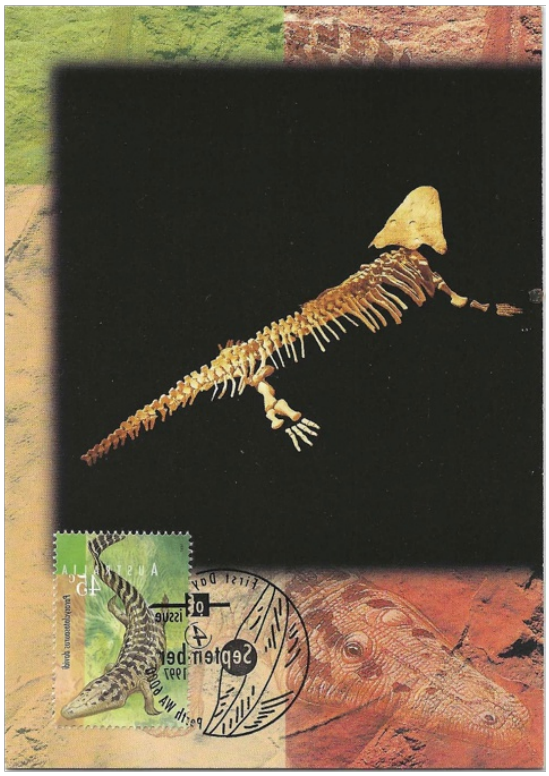
Figure 3: Philatelic Material for the Greenland 522 issue. Note the official first day cover envelope was used for all three issues in the set – for both single issues and the set of 3 on one cover. Postmarks courtesy of Michael Kogan. Other images are from the author's collection.

Figure 4: Special Maxi-cards showing fossil amphibians. The Libya 1985 Maxi-card is courtesy of Bob Nowakowski. The Switzerland 1959 Maxi-card is courtesy of Michael Kogan. The Australia 1997 Maxi-card is from the author's collection.

Libya, 1985



Switzerland, 1959



Australia, 1997

Figure 5, Postmark showing *Diadectes absitus* (now *Silvadectes absitus*), courtesy of Michael Kogan's paleophilatelie.eu.

Figure 6: Postmark for the Benin 1996 First Day Ceremony, courtesy of Michael Kogan's paleophilatelie.eu.

Acknowledgements:
The author kindly thanks Michael Kogan for reviewing drafts of this article.

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Ton Van Eijden's Stampedout.nl webpage

MAGNIFICENT BUTTERFLY: *Papilio homerus*

Vladimir Kachan, Belarus

Butterflies are airy and flying flowers on Earth. Their beauty is so stunning and inspiring that the love and admiration for them in some people gives rise to the desire to preserve this tenderness and lightness for a long time.

In the largest remaining stretch of tropical forest, deep in the hills of Jamaica, flies a giant among butterflies, the rare and endangered the Jamaican Giant Swallowtail (Figure 1). Threatened mostly by habitat loss through bauxite mining, this majestic butterfly has become the delicate ambassador of this still pristine habitat. As the largest species of the genus *Papilio* in the world and the largest butterfly in the Western Hemisphere, this rare butterfly once inhabited most of Jamaica (Figures 2, 3, 4, 5, 6, 7) but has now dwindled into only two tiny populations: an eastern population, found where the Blue Mountains and John Crow Mountains merge, and a western population in Cockpit Country. It is the largest of the true swallowtail species in the Americas with wingspan up to 15 centimeters and arguably one of the most spectacular butterflies in all of the world. The Jamaican Giant Swallowtail is a colourful butterfly (Figure 8), with bold and distinctive broad yellow bands on a black background, large tails, and hindwings trimmed with iridescent blue scaling. The Jamaican Giant Swallowtail butterfly is endemic to the island of Jamaica. Historically, it has been recorded from seven of Jamaica's fourteen parishes.

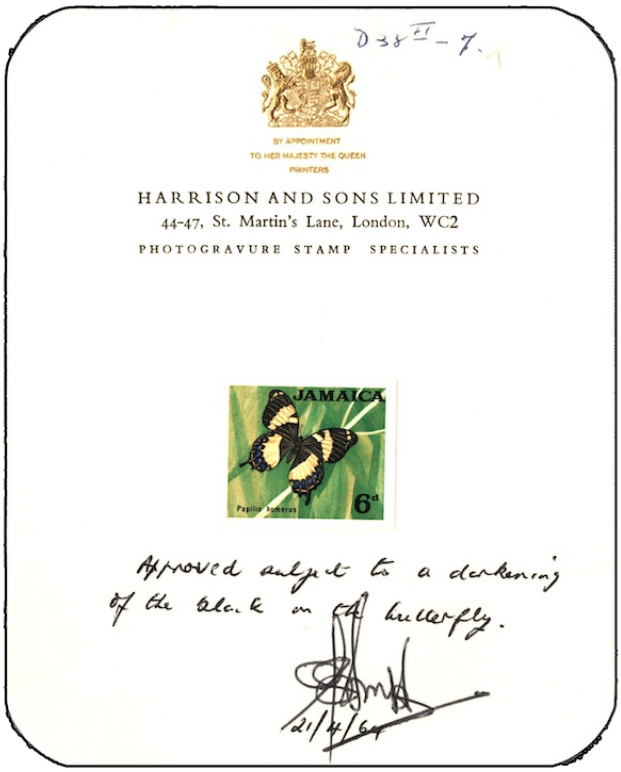


Figure 1 Jamaica imperforate proof depicting the butterfly *Papilio homerus* and approved on April 21, 1964

Figure 2 Stamp of Jamaica with butterfly *Papilio homerus* issued on May 4, 1964 (Scott #223)

Figure 3 Jamaica 1964 with shift blue color on the right hindwing wing of butterfly *Papilio homerus* - variety

Figure 4 Jamaica 1964 with blue omitted from hindwings of butterfly *Papilio homerus* - error (Scott #223a)

Figure 5 Jamaica 1964 with overprint on March 3, 1966 ROYAL VISIT MARCH 1966 (Scott #249)

Figure 6 Jamaica 1964 with overprint 5c C-DAY 8th September 1969 (Scott #283)

Figure 7 Vertical pair with major error (huge downward shift of black)

The grandeur of the Jamaican Giant Swallowtail has inspired artists since its discovery by Western culture. The Jamaican Giant Swallowtail was first described by Danish entomologist Johan Christian Fabricius (not from a specimen, but from a painting by English naturalist William Jones, who was among the early supporters of the Linnean Society and a great authority on butterflies), and who, awestruck by its beauty, named the butterfly *Papilio homerus* in honor of the Greek poet, Homer, the

Figure 8 Jamaica 1975 original essay with butterfly *Papilio homerus*

author of "The Iliad" and "The Odyssey." Even before Jones' paintings, *Papilio homerus* was the subject of paintings by English naturalist and a fine entomological artist Henry Seymer (1768) and collaborative paintings with his son, Henry Seymer Jr. (1773). Three years after the description by Fabricius, the German entomologist Eugenius Johann Christoph Esper illustrated Papilio homerus in his series of booklets, "The Butterflies" in "Illustrations of nature with descriptions".

According to historical information, recounting the circumstances of its original description, this magnificent *Papilio* was among the number of rarities of the insect race which Fabricius met with in the Entomological Cabinets of the English Naturalists. Fabricius' description account is, however, based on a painting, and not directly on a specimen. Fabricius saw the drawing of this insect in the Collection of Paintings formed by the ingenious hand of the indefatigable and liberal naturalist William Jones, and was so delighted with its grandeur that he determined to define the species by an appellation more than usually superlative (Figure 10).

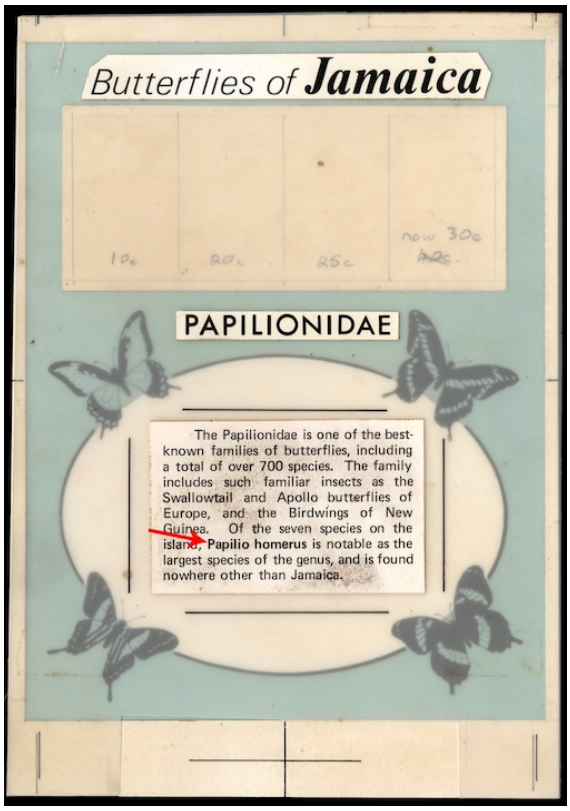


Figure 9 Jamaica 1975 butterflies miniature sheet mock-up

Figure 10 Stamp of Jamaica with butterfly *Papilio homerus* issued on September 7, 1970 (Scott #310)

But where did Jones get access to the specimen of the Jamaican Giant Swallowtail that he painted and who collected it? The English captured Jamaica in 1655. The original material of *Papilio homerus* was probably collected by English explorers and brought to Britain sometime after 1734. Painting of William Jones images of *Papilio homerus* was made 1783–1785. It was also indicated Jamaica as its origin, noting as very rare species (Figure 11).

Figure 11 Stamp of Jamaica with butterfly *Papilio homerus* issued on August 25, 1975 (Scott #401)

Since its description by Fabricius in 1793, *Papilio homerus* has been a highly prized butterfly. The Giant Swallowtail is representative of a unique tropical group of swallowtail butterflies and is found nowhere else in the world except Jamaica (Figure 12). *Papilio homerus* is the largest species in the genus with a forewing length that averages 75 mm, and some reported female specimens have a forewing length of 90 mm. The sexes of *Papilio homerus* are similar in coloration and pattern and the females are larger in size. The dorsal surface of the forewing and hindwing has a base color of dark brown to blackish with a broad, yellow discal band extending across both wings (Figure 13). Adult Jamaican swallowtails can soar at high

Figure 12 Stamp of St. Vincent 1998 with endangered butterfly *Papilio homerus* (Scott #2543)

elevations (up to 550m) rapidly gliding along wind current. Butterflies are observably active during all months.

Like virtually all butterflies, the Giant Swallowtail helps to pollinate flowers in the adult stage, helps recycle minerals in vegetation in the larval stage, and provides a food source to numerous insectivorous birds and mammals as well as many other rain forest inhabitants. Aesthetically, its majestic beauty and majestic flight is virtually unmatched by any other New World butterfly species (Figure 14, Figure 15). It adds a source of richness to the human observer's experience in Jamaica, and can serve as a powerful symbol of Jamaica's autonomy, the Jamaican lover of nature and the environment, and the extensive protected area system in Jamaica.

Figure 13 Souvenir sheet of Jamaica with butterfly *Papilio homerus* issued on August 18, 1994 (Scott #814)

Figure 14 Jamaica 1975 butterflies miniature sheet essay

In its endemic Jamaica, the butterfly simultaneously serves as an icon of national pride and a need for conservation efforts. Over the past half century, the Jamaican swallowtail has been featured on various postal stamps (Figure 16). In the face of rapid habitat destruction from human disruption and illegal collecting, the Jamaican swallowtail is listed on the Threatened Swallowtail Butterflies of the World by the International Union for Conservation of Nature 1985 (Red List) and is protected under international and national level legislation. Given the small number of adults left and the dwindling habitat, the species is considered and protected as a threatened species in various ways. The species is legally protected by the Convention for International Trade in Endangered Species 1987

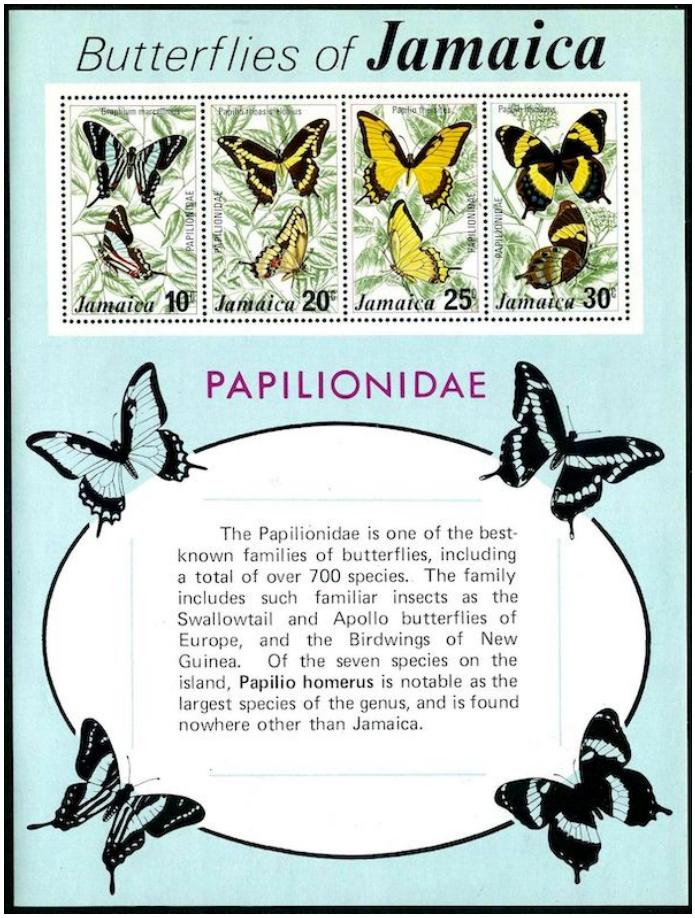


Figure 15 Miniature sheet of Jamaica with butterfly *Papilio homerus* issued on August 25, 1975 (Scott #401a)

Figure 16 Set stamps of Jamaica with butterfly *Papilio homerus* issued on August 18, 1994 (Scott #810-13)

under CITES Appendix 1 and the Jamaican Wildlife Protection Act of 1945 (amended 1988).

The range of this enigmatic butterfly, possibly less than 10 km^2 for each of the two remaining populations, continues to dwindle, particularly due to habitat destruction and recent mining initiatives. In addition, the extant populations of Papilio homerus (Figure 17) reside in areas of Jamaica famous for their difficult terrain, which further confounds the ability to perform the long-term field studies necessary for understanding the biology and population dynamics for this species.

Figure 17 Proposed butterfly *Papilio homerus* design by Phillip Hart in 1952

Figure 18 Stamp of Jamaica with butterfly *Papilio homerus* issued on October 28, 2016

The smooth outlines of the butterfly and the original shape of the tails make *Papilio homerus* a model of excellence in the richest world of Papilionidae. This "unofficial" national butterfly merits full designation as Jamaica's official National Butterfly (Figure 18).

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

BOTANY

Editor

Christopher E. Dahle BU 1269

New Listings

Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
ALBANIA		**2020 February 10** (Liberation of Albania 75y)		SS/2
3038		Sheet of 2		
3038a	250l	Poppies, *Papaver rhoeas*	Papaveraceae	Fl A SS
ALGERIA		**2018 October 16** (Honeycombs and flowers)		Set/2
1765	25d	Eucalyptus blossoms, *Eucalyptus sp.*	Myrtaceae	Fl B
1766	25d	Jujube bossoms, *Ziziphus jujuba*	Rhamnaceae	Fl B
		2019 May 11 (Protected Species)		Sheet/2
1786		Unidentified tree		T B U MS Z
ANDORRA (French)		**2020 October 2**		Single
827	€1.40	White fir, *Abies alba*	Pinaceae	T A
ANDORRA (Spanish)		**2020 July 8**		Single
480	€1.45	Linden leaf and flower, *Tilia cordata*	Malvaceae	Fl V A
ANTIGUA		**2019 June 11** (Beans)		Sheet/6
3557a	$3.00	Vanilla bean and flower, *Vanilla planifolia*	Orchidaceae	Fl Fr A MS
3557c	$4.00	Cocoa bean, *Theobroma cacao*	Malvaceae	Fr A MS
3557e	$5.00	Coffee beans, *Coffee arabica*	Rubiaceae	Fr A MS
		2019 June 11 (Beaches)		Sheet/6
3560a	$2.00	Darkwood Beach, *Cocos nucifera*	Arecaceae	T B MS
3560c	$4.00	Galley Bay Beach, *Cocos nucifera*	Arecaceae	T B MS
AUSTRALIA		**2020 August 17** (Opalized Fossils)		Set/4, SS/4 Perf 14x14¾
5188	$1.10	Pinecone	Pinaceae	Fr A
5191	$1.10	Wood		V A U
5191a		Souvenir sheet 1 each #5188-91		
		Set/4, S/A die cut 11¼		
5192	$1.10	Pinecone	Pinaceae	Fr A
5195	$1.10	Wood		V A U
5195a		Booklet pane of 10, 3 each #5192, 2 each #5193		
5195b		Booklet pane of 20, 5 each #5192-95		
		2**020 October 13** (National Botanic Gardens, Canberra 50y)		Set/2 Perf 14x14¾
5209	$1.10	Wee Jasper grevillea, *Grevillea iaspicula*	Proteaceae	Fl A
5210	$1.10	Silver banksia, *Banksia marginata*	Proteaceae	Fl A
		S/A die cut 11¼		
5211	$1.10	Wee Jasper grevillea, *Grevillea iaspicula*	Proteaceae	Fl A
5212	$1.10	Silver banksia, *Banksia marginata*	Proteaceae	Fl A

BOSNIA & HERZEGOVINA (Croat Admin.) **2020 May 22** SS/1

412	5m	Dandelions, *Taraxacum campylodes*	Asteraceae	Fl	A SS

2020 November 1 (Flowers) Pair

418a	2.70m	*Veronica saturejoides*	Plantaginaceae	Fl	A
418b	2.70m	*Moltkia petraea*	Boraginaceae	Fl	A

BRAZIL **2017 September 22** (Flora of the Atlantic Forest) See Vol. 69 (1) p.18

3362	(1.80r)	Begonia, *Begonia angularis*	Begoniaceae	Fl	A
		Anthurium, *Anthurium lucioi*	Araceae	Fl	A
		White Ipê, *Tabebuia roseoalba*	Bignoniaceae	Fl	A
		Pink Ipê, *Handroanthus heptaphyllus*	Bignoniaceae	Fl	A

CANADA **2020 October 28** (Ptg: "Trenches on the Somme" by Mary Hamilton)

3252	P (92c)	Poppies, *Papaver rhoeas*	Papaveraceae	Fl	B
3252a		Booklet pane of 20			

CARIBBEAN NETHERLANDS **2020 July 1** (Flowers and Plants)

Inscribed "Bonaire"

125		Horiz strip of 5			
125a	75c	Century plant, *Agave americana*	Asparagaceae	Fl	A
125b	75c	Bougainvillea *Bougainvillea glabra*	Nyctaginaceae	Fl	A
125c	75c	Hibiscus, *Hibiscus rosa-sinensis*	Malvaceae	Fl	A
125d	75c	*Handroanthus (=Tabebuia) bilbergii*	Bignoniaceae	Fl	A
125e	75c	Red-sage, *Lantana camara*	Verbenaceae	Fl	A

Inscribed "Saba"

126		Horiz strip of 5			
126a	75c	Yellow elder, *Tecoma stans*	Bignoniaceae	Fl	A
126b	75c	Striped Barbados lily, *Hippeastrum striatum*	Amaryllidaceae	Fl	A
126c	75c	Moth orchid, *Phalaenopsis sp.*	Orchidaceae	Fl	A
126d	75c	Black-eyed susan, *Rudbeckia hirta*	Asteraceae	Fl	A
123e	75c	Red ginger, *Alpinia purpurata*	Zingiberaceae	Fl	A

Inscribed "St. Eustatius"

127		Horiz strip of 5			
127a	75c	Aloe, *Aloe vera*	Xanthorrhoeaceae	Fl	A
127b	75c	Anthurium, *Anthurium andraeanum*	Araceae	Fl	A
127c	75c	Oleander, *Nerium oleander*	Apocynaceae	Fl	A
127d	75c	Fuchsia, *Fuchsia sp*.	Onagraceae	Fl	A
127e	75c	Cattleya, *Cattleya luteola*	Orchidaceae	Fl	A

CHINA (TAIWAN) **2020 August 12** (Nantou County tourist attractions) Set/4

4547	$8	Camphor trees, Jiji Green Tunnel, *Cinnamomum camphora*	Lauraceae	T	B

2020 October 14 (Poems and Paintings) Set/4

4558	$12	"New Bamboo" poem by Zheng Banqiao	Poaceae	V	A
4559	$15	"Chrysanthemums" poem by Yuan Zhen *Chrysanthemum sp*.	Asteraceae	Fl	A

CHINA, PEOPLE'S REPUBLIC **2020 March 20** (Ptg by Wu Guanzhing) Set/6

4703	$1.20	"Sorghum and Cotton" *Sorgo bicolor*	Poaceae	V A
		Gossypium hirsutum	Malvaceae	V A
4704	$1.20	"Melon Vines" *Cucumis melo*	Cucurbitaceae	V A

2020 May 17 ("The Dream of Red Mansions" novel by Car Xueqin) Set/4, SS/1

4721	$6	Xiagyun sleeps among the peonies P*aeonia officinalis*	Paeoniaceae	Fl B

2020 May 20 (Roses in various colors & birds) Set/4

4722	$1.20	With swallows, *Rosa x hybrida*	Rosaceae	Fl A
4723	$1.20	With ducks, *Rosa x hybrida*	Rosaceae	Fl A
4724	$1.50	With birds, *Rosa x hybrida*	Rosaceae	Fl A
4725	$1.50	With swans, *Rosa x hybrida*	Rosaceae	Fl A

COLOMBIA **2020 August 14** (Colombian National Parks, 3rd series) Sheet/10

1543d	2000p	Flora near Laguna las Mellizas, Las Hermosas Gloria Valencia de Castaño NP *Espeletia hartwegiana*	Asteraceae	Fl B
1543i	2000p	Puracé National Park *Lepanthes sp. nov.*	Orchidaceae	Fl A

CONGO REPUBLIC **1996** (Anniversaries: FAO 50y) Set/5

1133J	300fr	Cacao, *Theobroma cacao*	Malvaceae	Fr B
		Maize, *Zea mays*	Poaceae	Fr B
		Manioc, *Manihot esculentum*	Euphorbiaceae	V B

FRENCH POLYNESIA **2020 August 20** Single

1253	100fr	Bananas, *Musa x paradisiaca*	Musaceae	Fr A

HUNGARY **2020 August 5** (Flora and Fauna) Set/4

4565		Horiz strip of 4		
4565b	185fo	Cone flower, *Rudbeckia purpurea*	Asteraceae	Fl A
4565c	185fo	Tatar maple, *Acer tataricum*	Sapindaceae	T A

ICELAND **2020 October 29** (Garden vegetables) Set/2

1523	(230k)	Carrots, *Daucus carota*	Apiaceae	V A
1524	(315k)	Turnip, *Brassica rapa*	Brassicaceae	V A

JAPAN **2020 March 19** (Art) Set/20

4382		Sheet of 10		
4382b	63¥	Ptg: "Irises" from scroll of Sakai *Iris japonica*	Iridaceae	Fl A
4382j	63¥	Ptg: Water Lilies by Monet *Nymphaea sp.*	Nymphaeaceae	Fl A
4383		Sheet of 10		
4383b	84¥	Ptg: Irises from scroll of Sakai *Iris japonica*	Iridaceae	Fl A
4383j	84¥	Ptg: "Water Lilies" by Monet *Nymphaea sp.*	Nymphaeaceae	Fl A

2020 April 1 Set/10

4384		Sheet of 10		
4384a	63¥	White roses, *Rosa x hybrida*	Rosaceae	Fl A
4384b	63¥	Pink roses, *Rosa x hybrida*	Rosaceae	Fl A
4384c	63¥	Purple roses, *Rosa x hybrida*	Rosaceae	Fl A
4384d	63¥	Orange roses, *Rosa x hybrida*	Rosaceae	Fl A

JAPAN (continued)

4384e	63¥	Red roses, *Rosa x hybrida*	Rosaceae	Fl A
4385		Sheet of 10		
4385a	84¥	Purple roses, *Rosa x hybrida*	Rosaceae	Fl A
4385b	84¥	Orange roses, *Rosa x hybrida*	Rosaceae	Fl A
4385c	84¥	Red roses, *Rosa x hybrida*	Rosaceae	Fl A
4385d	84¥	Pink roses, *Rosa x hybrida*	Rosaceae	Fl A
4385e	84¥	White roses, *Rosa x hybrida*	Rosaceae	Fl A

2020 April 6 (UN Conference on Crime Prévention & Criminal Justice) Set/5

4386		Sheet of 10		
4386b	84¥	Cherry blossom emblem, *Prunus serrulata*	Rosaceae	Fl B MS

2020 April 15 Set/3

4388	84¥	Stylized tree		T A S
4389	94¥	Stylized tree		T A S

2020 April 20 (Screen Painting by Korin Ogata) Set/2

4390	84¥	Plum tree with white blossoms, *Prunus mume*	Rosaceae	Fl A
4391	84¥	Plum tree with red blossoms, *Prunus mume*	Rosaceae	Fl A
4391a		Horiz pair		

2020 May 14 (Stylized Flowers) Set/5

4396		Sheet of 10		
4396a	84¥	Roses, *Rosa x hybrida*	Rosaceae	Fl A S
		Lily-of-the-valley, *Convallaria majalis*	Asparagaceae	Fl A S
4396b	84¥	Calla lilies, *Zantedeschia aethiopica*	Araceae	Fl A S
		Lily-of-the-valley, *Convallaria majalis*	Asparagaceae	Fl A S
4396c	84¥	Lily-of-the-valley, *Convallaria majalis*	Asparagaceae	Fl A S
4396d	84¥	Lilies, *Lilium sp.*	Liliaceae	Fl A S
4396e	84¥	Roses, *Rosa x hybrida*	Rosaceae	Fl A S
		Lily-of-the-valley, *Convallaria majalis*	Asparagaceae	Fl A S
4397		Sheet of 10		
4397a	94¥	U/I		Fl A S
4397b	94¥	U/I		Fl A S

2020 June 1 (Summer Greetings) Set/20

4402		Sheet of 10		
4402a	63¥	Red ginger, *Alpinia purpurata*	Zingiberaceae	Fl A MS
4402b	63¥	Palm tree	Arecaceae	T A MS
4402c	63¥	Palm tree	Arecaceae	T A MS
4402d	63¥	Papaya, *Carica papaya*	Caricaceae	Fr A MS
4402e	63¥	Sunflower, *Helianthus annuus*	Asteraceae	Fl A MS
4402f	63¥	Bird-of-Paradise, *Strelitzia regina*	Musaceae	Fl A MS
4402g	63¥	Hibiscus, *Hibiscus rosa-sinensis*	Malvaceae	Fl A MS
4402h	73¥	Frangipani, *Plumeria rubra*	Apocynaceae	Fl A MS
4402j	63¥	Hibiscus, *Hibiscus rosa-sinensis*	Malvaceae	Fl A MS

JAPAN (continued)

4403		Sheet of 10		
4403a	84¥	Palm tree	Arecaceae	T A MS
4403b	84¥	Frangipani, *Plumeria rubra*	Apocynaceae	Fl A MS
4403c	84¥	Palm tree	Arecaceae	T A MS
4403e	84¥	Red ginger, *Alpinia purpurata*	Zingiberaceae	Fl A MS
4403g	84¥	Frangipani, *Plumeria alba*	Apocynaceae	Fl A MS

2020 June 10 (Flora and Fauna of Iriomote island) Set/10

4404		Sheet of 10		
4404g	84¥	Bamboo orchid, *Arundina graminifolia*	Orchidaceae	Fl A MS
4404h	84¥	Screw pine cone, *Pandanus utilis*	Pandanaceae	Fr A MS
4404i	84¥	Powder-puff tree, *Calliandra haematocephala*	Fabaceae	Fl A MS
4404j	84¥	Loop-root mangrove, *Rhizophora mucronata*	Rhizophoraceae	T A MS

2020 June 19 Set/20

4407		Sheet of 10		
4407a	63¥	Mulberries, *Morus nigra*	Moraceae	Fr A
4407b	63¥	Bitter melon, *Momordica charantia*	Cucurbitaceae	Fr A
4407g	63¥	Pea pod *Pisum sativum*	Fabaceae	Fr A
4407i	63¥	Dianthus, *Dianthus sp.*	Caryophyllaceae	Fl A
4407j	63¥	Roses, *Rosa x hybrida*	Rosaceae	Fl A
4408		Sheet of 10		
4408h	84¥	Ear of corn, *Zea mays*	Poaceae	Fr A
4408i	84¥	Sunflowers, *Helianthus annuus*	Asteraceae	Fl A

2020 August 3 (Philanippon 2021 World Stamp Exhibition) Set/10

4422		Sheet of 10		
4422b	84¥	Cherry blossoms, *Prunus serrulata*	Rosaceae	Fl A MS
4422d	84¥	Cosmos flowers, *Cosmos bipinnatus*	Asteraceae	Fl B MS
4422e	84¥	Larch forest, *Larix kaempferi*	Pinaceae	T A MS
4422f	84¥	Cherry blossoms, *Prunus serrulata*	Rosaceae	Fl A MS
4422g	84¥	Tea plantation, *Camellia sinensis*	Theaceae	V A MS
4422h	84¥	Azalea garden, *Rhododendron sp*.	Ericaceae	Fl A MS
4422i	84¥	Cosmos flowers, *Cosmos bipinnatus*	Asteraceae	Fl B MS

2020 August 18 Set/10

4423		Sheet of 10		
4423a	63¥	Ginkgo leaves, *Ginkgo biloba*	Ginkgoaceae	V A
4423b	63¥	Dahlia, *Dahlia x hybrida*	Asteraceae	Fl A
		Cosmos, *Cosmos bipinnatus*	Asteraceae	Fl A
4423c	63¥	Gentians, *Gentiana scabra*	Gentianaceae	Fl A
4423d	63¥	Chrysanthemums, *Chrysanthemum sp.*	Asteraceae	Fl A
4423e	63¥	Roses, *Rosa x hybrida*	Rosaceae	Fl A
4424		Sheet of 10		
4424a	84¥	Maple leaves, *Acer palmatum*	Sapindaceae	V A
4424b	84¥	Dahlia, *Dahlia x hybrida*	Asteraceae	Fl A
		Cosmos, *Cosmos bipinnatus*	Asteraceae	Fl A

JAPAN (continued)

4424c	84¥	Chinese bellflowers, *Platycodon grandiflorus*	Campanulaceae	Fl A
4424d	84¥	Cockscomb, *Celosia argentea*	Amaranthaceae	Fl A
4424e	84¥	Roses, *Rosa x hybrida*	Rosaceae	Fl A

2020 August 21 (Autumn Greetings) Set/20

4425		Sheet of 10		
4425a	63¥	Maple leaf, *Acer rubrum*	Sapindaceae	V A
4425b	63¥	Pine cone, *Pinus sp*.	Pinaceae	Fr A
4425c	63¥	Pear, *Pyrus communis*	Rosaceae	Fr A
425d	63¥	Red leaf		V A
4425e	63¥	Oak leaf, *Quercus glauca*	Fagaceae	V A
4425f	63¥	Persimmon, *Diospyros kaki*	Ebenaceae	Fr A
4425g	63¥	Pumpkin, *Cucurbita pepo*	Cucurbitaceae	Fr A
4425h	63¥	Orange leaf		V A
4425i	63¥	Acorns, *Quercus sp*.	Fagaceae	Fr A
4425j	63¥	Fig, *Ficus carica*	Moraceae	Fr A
4426		Sheet of 10		
4426a	84¥	Acorns, *Quercus sp.*	Fagaceae	Fr A
4426b	84¥	Ginkgo leaves, *Ginkgo biloba*	Ginkgoaceae	V A
4426c	84¥	Squashes, *Cucurbita pepo*	Cucurbitaceae	Fr A
4426d	84¥	Pine cones, *Pinus sp.*	Pinaceae	Fr A
4426e	84¥	Persimmons, *Diospyros kaki*	Ebenaceae	Fr A
4426f	84¥	Rambutans, *Nephelium lappaceum*	Sapindaceae	Fr A
4426g	84¥	Leaves		V A
4426h	84¥	Pears, *Pyrus communis*	Rosaceae	Fr A
4426i	84¥	Figs, *Ficus carica*	Moraceae	Fr A
4426j	84¥	Leaves		V A

KOREA, SOUTH **2020 May 29** (Intl. Year of Plant Health) Single

2570	380w	Stylized plants		V S U

2020 August 7(Protected Marine Life) Set/4

2574a	380w	Eelgrass, *Zostera marina*	Zosteraceae	V A
2574d	380w	Asian surf grass, *Phyllospadix japonicus*	Zosteraceae	V A

MALTA **2020 October 24** (Viticulture) Pair

1692	59c	Vineyard in Malta, grapes, *Vitis vinifera*	Vitaceae	Fr B
1693	59c	Vineyard in Slovakia, *Vitis vinifera*	Vitaceae	V B

MONGOLIA **2020 July 8** (Landscape types of 2018) Set/7

2945	1300t	*Campanula stevenii* subsp. *turczaninovii*	Campanulaceae	Fl B
2946	1300t	*Ranunculus kamchaticus =(Oxygraphis glacialis)*	Ranunculaceae	Fl B
2947	1300t	Dwarf white waterlily *Nymphaea candida*	Nymphaeaceae	Fl B
2948	1300t	Glacial snow lotus *Saussurea glacialis*	Asteraceae	Fl B
2949	1300t	Lady's slipper *Cypripedium calceolus*	Orchidaceae	Fl B
2950	1300t	Siberian lily *Lilium pensylvanicum*	Liliaceae	Fl B
2951	1300t	Martagon lily *Lilium martagon*	Liliaceae	Fl B

MOROCCO **2020 February 27**

(Flower type of 1975-81 Redrawn, See **Plants on Stamps** Vol 2 p 62 & Vol 3 p 253) Set/5, S/2

1285		Booklet pane of 5		
1285a	375d	*Asteriscus imbricatus*	Asteraceae	Fl A
1285b	375d	Pansy, *Viola x wittrockiana*	Violaceae	Fl A
1285c	375d	Poppy, *Papaver rhoeas*	Papaveraceae	Fl A
1285d	375d	Geranium, *Pelargonium sp.*	Geraniaceae	Fl A
1285e	375d	Daisy, *Chrysanthemum sp.*	Asteraceae	Fl A

2020 June 5 (World Environment Day) Set/2

1287b	9d	Mt. Atlas Mastic tree, *Pistacia atlantic*a	Anacardiaceae	T A
1287d		Same species perf 13¼		
1287e		Souvenir sheet #1287c & 1287d		

PAPUA NEW GUINEA **2020 May 27** (Breadfruit) Set/8, SS/1

2001	1.60k	Male & female flowers, *Artocarpus altilis*	Moraceae	Fl A
2002	2.50k	Female flower, Same species		Fl A
2003	3.45k	Fruit, Same species		Fr A
2004	10k	Mature fruit, Same species		Fr A
2005		Sheet of 4		Fl A MS
2005a	5k	Flower, Same species		Fr A MS
2005b	5k	Sprouting fruit, Same species		V A MS
2005c	5k	Leaf, Same species		Fr A MS
2005d	5k	Fruit, Same species		Fr A MS
2006	20k	Mature fruit, Same species		Fr A MS

2014 #1640-41 surcharged, sans-serif "K"

1734F	1.30k	on 1.20k	*Dendrobium macrophyllum*	Orchidaceae	Fl A
1734G	1.30k	on 1.20k	*Dendrobium williamsianum*	Orchidaceae	Fl A

RUSSIA **2020 August 24** (Prince Golitsyn, vintner) Single

6192	50r	Vineyard, *Vitis vinifera*	Vitaceae	V B

SAN MARINO **2020 June 16** (Asiago International Philatelic Art Prize 50y) Single, embossed

2071	€2.20	Edelweiss, *Leontopodium alpinum*	Asteraceae	Fl A

SERBIA **2020 July 15** (Berries) Set/2

918	8d	Raspberries, *Rubus idaeus*	Rosaceae	Fr A
919	11d	Cherries, *Prunus avium*	Rosaceae	Fr A

2020 November 3 (Natural History Museum 125y) Set/4

927a	27d	*Nepeta rtanjensis*	Lamiaceae	Fl A

SLOVAKIA **2020 June 17** (Kosice Botanical Garden 70y) SS/1

850	€2.80	Magnolia, *Magnolia grandiflora*	Magnoliaceae	Fl A SS

2020 October 24 (Viticulture) Pair

860a	€1.65	Vineyard in Slovakia, *Vitis vinifera*	Vitaceae	V B
860b	€1.65	Vineyard in Malta, grapes *Vitis vinifera*	Vitaceae	Fr B

S. GEORGIA & S. SANDWICH IS. **2020 October 15** (Definitives) Set/12

620	2p	Greater burnet, *Sanguisorba officinalis*	Rosaceae	Fl A

UNITED NATIONS

New York **2020 December 5** (World Soil Day) Set/5 + labels

1259 $1.20 Stylized grain Poaceae Fr A
1262 $1.20 Stylized tree T A U

UNITED STATES **2020 October 16** (Winter Scenes) Set/10

5534 (55c) Unidentified conifers Pinaceae T B U

Garden Beauty

Gardening is one of the nation's favorite pastimes, and with these stunning new stamps, the U.S. Postal Service celebrates the American passion for flowers and gardens.

Allen Rokach took the photos that grace the stamps. With these close-up shots, the flowers are the stars, taking up almost the entire frame of each photo. Each stamp features one of the following flowers: a pink flowering dogwood; a rose-pink and white tulip; an Allium or ornamental onion; a pink and white Asiatic lily; a magenta dahlia; a yellow and pink American lotus; a pink moth orchid with mottled petals; a pink and white sacred lotus; an orange and yellow tulip; and a yellow moth orchid with a pink center.

Gardens can be as small as a collection of pots on a windowsill or as large as space, money, and time will allow. Orchids, cacti, herbs, and many other flowering plants can be grown indoors as well as outside. There are any number of outdoor garden styles, including enchanting cottage gardens; water gardens, where lotus abound; woodland gardens that feature flowering trees and shrubs; and even gardens that highlight only one kind or one color of flower.

Some gardens feature bright, sun-loving annuals (plants that last one gardening year); others highlight the beauty of perennials (plants that come back year after year). The two types woven together in a flower bed can create a colorful garden that produces blooms from early spring to late fall. Plantings can be formal or whimsical, regimented or exuberant.

Greenhouses, nurseries, catalogs - there are any number of ways to find plants, seeds, bulbs. Gardeners love to trade cuttings from their plantings as well as share tips and advice. With thousands of garden clubs across the country, experienced and novice gardeners alike can find a community of like- minded enthusiasts. Almost uncountable numbers of books, magazines, websites, and blogs - not to mention local classes - make flower gardening an easy and captivating hobby to begin, so you can create garden beauty of your own.

Art director Ethel Kessler designed the stamp with existing photographs by Allen Rokach.

From the USPS website:
https://store.usps.com/store/product/buy-stamps/garden-beauty-S_683104

New Plants in the Philatelic Herbarium

By Christopher E. Dahle, BU 1269

Zostera marina ZOSTERACEAE

Common name: Eelgrass

Synonyms: 14

Underwater perennial. Leaves 5-10 mm wide up to 1 m long. Flowers appear in the sheaths at leaf bases. Fruits float. Grow in brackish and salt water, in beds or meadows, at depths of 1-3 m. Found along coasts of North America and Eurasia. Provides cover for fish and invertebrates.

South Korea Scott #2574a. Issued 7 August 2020 in a block of 4, the third in the series Protected Marine Species. Designed by Park Eunkyung. A total of 688,000 were printed in four colors by offset with gold foil by Southern Colour Print in Dunedin, New Zealand.

Phyllospadix japonicus ZOSTERACEAE

Common name: Asian surf grass

Underwater marine perennial. Leaves, alternate, 2.5 mm wide up to 100 cm long. Grows in fine gravel and sand. Shorelines of Japan, Korea, China and Russia in intertidal zone to depths of 8 m.

South Korea Scott #2574d. Issued on 7 August 2020 , one of four in a series of Protected Marine Species.

Campanula stevenii subsp**. turczaninovii** CAMPANULACEAE

Synonyms: 12 synonyms

Perennial herb 14-20 cm. Narrow lanceolate leaves. Violet-blue flowers. Alpine meadows, tundra and rocky slopes of eastern Russia, Siberia and Mongolia.

Mongolia Scott # 2945. Issued 8 July 2020 in a set of 7, Mongolian Beautiful Landscapes III. Printed by offset in sheets of 12.

Grevillea iaspicula PROTEACEAE

Common name: Wee Jasper Grevillea

Shrub 1.2-1.5 m. Leaves Flowers 2-3 cm long cream to green with pink or red style appear May to November. Extremely rare, only 100 plants, in Lake Burrinjuck and Wee Jasper areas of New South Wales. Grow in rocky areas.

Australia Scott #5209 and 5211. Issued 13 October 2020 in a set of 2 for the 50th Anniversary of the National Botanic Gardens in Canberra. Designed by Sharon Rodziewicz of the Australia Post Design Studio from a photograph by Murray Fagg. Gummed stamps were printed by EGO on Tullis Russell Red Phos paper by offset lithography and perforated 14x14¾ (13.86x14.6). Self-adhesive stamps were printed by Rapid Labels by inkjet printing on Yenom Cast Gloss SWG80 paper. Self-adhesive booklets were printed on Acronvert Securepost MC90 paper using inkjet printing by Rapid Labels. Coil stamps were printed by MCC on RAF Unik Stampcoat paper by flexographic printing.

Veronica saturejoides PLANTAGINACEAE

Common name: Vriskova čestoslavica

Creeping perennial 10-30 cm. Leaves simple, serrated, forming a rosette. Blue flowers in June and July. Endemic to Bosnia and Herzegovina.

Bosnia & Herzegovina (Croat Administration) Scott #418a. Issued 1 November 2020 in a horizontal pair for Endemic Flora 2020. Designed by Vilim Parić. Printed on white, 102g, self-adhesive paper by AKD d.o.o. in Zagreb with a print-run of 10,000 copies in sheets of 8 with 2 designs.

Moltkia petraea BORAGINACEAE

Common name: Modro lasinje

Synonyms: *Echium petraeum, E. rosmarinifolium, Lithospermum petraeum, L. rosmarinifolium, Lobostemon rosmarinifolius*

Small semi-evergreen shrub 20-40 cm with erect, hairy stems. Leaves alternate, linear to oblong, 1-5 cm long 1-6 mm wide, dark green. Violet-blue flowers in dense terminal cymes, 3-4 cm, from May to July. Found in mountains from Albania to Bosnia and Herzegovina.

Bosnia & Herzegovina (Croat Administration) Scott #418b. Issued 1 November 2020 for Endemic Flora 2020.

Nepeta rtanjensis LAMIACEAE

Geographically isolated relict species discovered in 1974. Critically endangered. Grows on the Rtanj Mountain in SE Serbia on calcareous rocks. Essential oils studied for medical uses.

Serbia Scott #927a. Issued 3 November 2020 in a set of 4 for the 125th Anniversary of the natural History Museum in Belgrade. Designed by Miroslav Nikolić in a sheet of 20.

FUNGI

Editor

Paul A. Mistretta, BU 1681

New Listings

Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
BELGIUM		**2020 April** 6 (Mushrooms) Set/5		
2934a	1 (98c)	*Crucibulum crucibuliforme*	Nidulariaceae	A
2934b	1 (98c)	Basket stinkhorn, *Clathrus ruber*	Phallaceae	A
2934c	1 (98c)	Devil's fingers, *Clathrus archeri*	Phallaceae	A
2934d	1 (98c)	Rayed earthstar, four-footed earthstar; *Geastrum quadrifidum*	Geastraceae	A
2934e	1 (98c)	Yellow stagshorn, *Calocera viscosa*	Dacrymycetaceae	A
BELARUS		**2020 October 26** (Slime Molds) Set/3, SS/6		
1173	A (5.4k)	*Arcyria globosa*	Arcyriaceae	A
1174	N (1.32r)	*Cribaria purpurea*	Cribariaceae	A
1175	H (1.68r)	*Physarum album*	Physaraceae	A
1175a		Souvenir sheet of 6, 2 eacch #1173-75		

Note: Historically included in the Kingdom "Fungi" the 'plasmodia or acellular slime molds' are now commonly placed in 'Myxogastria', which, depending on the taxonomy accepted, removes them from the kingdom "Fungi". A relatively nontechnical explanation for this can be found at: https://en.wikipedia.org/wiki/Kingdom_(biology)#Eight_kingdoms. I include these three stamps since when I was studying Mycology in grad school (45 years ago) Myxomycetes was still considered to be members of the Kingdom "Fungi". Plus, quite simply, they are fascinating organisms with some unique characteristics not found in other fungi.

CZECH REPUBLIC		**2020 April 22** (Mushrooms) Set/2		
3286	B (19k)	Fly agaric, *Amanita muscaria* ☠	Amanitaceae	A
3287	B (19k)	Satan's bolete, *Rubroboletus satanas* ☠	Boletaceae	A
3287a		Booklet pane of 10 each of Sc#3286 & 3287		
DJIBOUTI		**2019 December 12** (Mushrooms) Set/4, SS/1		
1886a	250fr	Orange birch bolete, *Leccinum versipelle*	Boletaceae	A
1886b	250fr	White beech mushroom, *Hypsizygus tessalatus*	Tricholomataceae	A
1886c	250fr	Rough stemmed bolete, Scaber stalk, Birch bolete, *Leccinum scabrum*	Boletaceae	A
1886d	250fr	Yellow morel, *Morchella esculenta*	Morchellaceae	A
1896	1000fr	Penny bun, Cep, Porcino, *Boletus edulis*	Boletaceae	A
ESTONIA		**2020 August 28** (Mushrooms) Single		
931	€0.90	Panther cap, False blusher, *Amanita pantherina* ☠	Amanitaceae	A
JAPAN		**2020 June 16** (Mushrooms) Set/10		
4405		Miniature sheet of ten stamps		
4405b	63¥	Dried seaweed, fish and mushrooms; 3 stylized mushrooms		C G
MONTENEGRO		**2020 March 16** (Mushrooms) Single		
459	95c	Berkeley's earthstar, *Geastrum berkeleyi*	Geastraceae	A
SAN MARINO		**2020 November 11** (Intl Day of Awareness on Food Loss and Waste Reduction) Single		
2084	€1.15	Mushrooms among other foods		C

MAMMALIA

Editor
Michael Prince, LM 68

New Listings

Scott#	Denom	Common Name/Scientific Name		Family/Subfamily	Code
ALGERIA		**2019 May 1**1 (Protected Species) SS/2			
1786a	25d	Arabian Oryx, *Oryx leucoryx*		Bovidae	A
AUSTRALIA		**2020 August 4** (Wildlife Recovery) Set/5 Perf 14x14¾			
5175	$1.10	Kangaroo Island Dunnart, *Sminthopsis aitkeni*	NEW	Dasyuridae	A
		Perf 14¼ x 14			
5178	$1.10	Koala, *Phascolarctos cinereus*		Phascolarctidae	A
5178a		Souvenir sheet of 6 #5273-78			
		SA, die cut 11¼ Set/5			
5181	$1.10	Kangaroo Island Dunnart, *Sminthopsis aitkeni*	NEW	Dasyuridae	A
5281a		Booklet pane of 10			
BRAZIL		**2019 September 23** (Fauna) Set/3			
3427b	(2r70)	Maned Three-toed Sloth, *Bradypus torquatus*		Bradypodidae	A
3427c	(2r70)	Black Lion Tamarin, *Leontopithecus chrysopygus*	NEW	Cebidae	A
CARIBBEAN NETHERLANDS					
Inscribed "Bonaire"		**2020 July 1** (Marine Life) Set/5			
122d	75c	Spinner Dolphin, *Stenella longirostris*		Delphinidae	A
DJIBOUTI		**2019 December 12** (Dolphins) Minisheet/4, SS/1			
1879a	250fr	Indo-Pacific Bottlenose Dolphin, *Tursiops aduncus*		Delphinidae	A
1879b	250fr	Spinner Dolphin, *Stenella longirostris*		Delphinidae	A
		Striped Dolphin, *Stenella coeruleoalba*		Delphinidae	A
1879c	250fr	Common Bottlenose Dolphin, *Tursiops truncatus*		Delphinidae	A
1879d	250fr	Pacific White-sided Dolphin, *Lagenorhynchus obliquidens*		Delphinidae	A
		Hector's Dolphin, *Cephalorhynchus hectori*		Delphinidae	A
1889	1000fr	Amazon River Dolphin, *Inia geoffrensis*		Iniidae	A SS
Margin		Long-beaked Common Dolphin, *Delphinus capensis*		Delphinidae	A SSZ
		Common Bottlenose Dolphin, *Tursiops truncatus*		Delphinidae	A SS Z
		2019 December 12 (Antarctic Animals) Minisheet/4, SS/1			
1885a	250fr	Weddell Seal, *Leptonychotes weddellii*		Phocidae	A
1885c	250fr	Crabeater Seal, *Lobodon carcinophagus*		Phocidae	A
1895	1000fr	Humpback Whale, *Megaptera novaeangliae*		Balaenopteridae	A
GERMANY		**2020 September 3** (Juvenile Animals) Set/2			
3181	80c	European Otter, *Lutra lutra*		Mustelidae	A
3182	95c	Hazel Dormouse, *Muscardinus avellanarius*		Gliridae	A

GREENLAND **2020 May 18** (Mammals) Set/2

842 16k Muskox, *Ovibos moschatus* Bovidae A
843 18k Walrus, *Odobenus rosmarus* Odobenidae A

HONG KONG **2020 June 23** (Qinghai Hoh Xii UNESCO World Heritage Site) SS/1

2087 $10 Chiru, *Pantholops hodgsonii* Bovidae A SS Z

2020 August 18 (Ocean Park Hong Kong Theme Park) Set/6, SS/1

2088 $2 Indo-Pacific Bottlenose Dolphin, Tursiops aduncus Delphinidae A
2090 $3.40 Golden Snub-nosed Monkey, *Rhinopithecus roxellana* Cercopithecidae A
2091 $3.70 Meercat, *Suricata suricatta* Herpestidae A
2092 $4.90 Giant Panda, *Ailuropoda melanoleuca* Ursidae A

JAPAN **2020 June 10** (Flora and Fauna of Iriomote Island) Set/10

4404 Sheet of 10
4404d 84¥ Leopard Cat, *Prionailurus bengalensis euptilurus* Felidae A MS

2020 July 17 (Protection of Historic Sites and Natural Monuments) Set/10

4411 Sheet of 10
4411i 84y Japanese Serow, *Capricornis crispus* Bovidae A

MALI **2014 January 11** (Serval type of 2014) Single

1167 1000fr Serval, *Leptailurus serval* Felidae A

MONGOLIA **2020 July 8** (Landscapes with Fauna and Flora) Set/7

2945 1300t Mongolian Five-toed Jerboa, *Allactaga sibirica* NEW Dipodidae B
2946 1300t Snow Leopard, *Panthera uncia* Felidae B
2949 1300t Red Deer (Elk), *Cervus elaphus* Cervidae B
2950 1300t Mongolian Gazelle, *Procapra gutturosa* Bovidae B
2951 1300t Eurasian Red Squirrel, *Sciurus vulgaris* Sciuridae B

NAMIBIA **2019 April 25** (Whales, inscribed "Reprint" type of 2019) Single

1385 ($32) Pygmy Sperm Whale, *Kogia breviceps* Kogiidae A

2019 August 1 (Wild Cats) Set/3

1390 ($8.40) Lion, *Panther leo* Felidae A
South African Fur Seal, *Arctocephalus pusillus* Otariidae B
1391 ($8.40) Cheetah, *Acinonyx jubatus* Felidae A
Steenbok, *Raphicerus campestris* Bovidae B
1392 ($8.40) Leopard, *Panthera pardus* Felidae A
Rock Hyrax, *Procavia capensis* Procaviidae B

NORWAY **2020 April 17** (Ship and Orca) Single

1896 (26k) Orca (Killer Whale), *Orcinus orca* Delphinidae B

ROMANIA **2020 June 10** (Squirrels) Set/4 + labels

6424 3.30l Indian Giant Squirrel, *Ratufa indica* Sciuridae A
6424a Sheet of 5 + label
6425 5l Indian Palm Squirrel, *Funambulus palmarum* Sciuridae A
6425a Sheet of 5 + label

ROMANIA (continued)

6426	8.50l	Eastern Grey Squirrel, *Sciurus carolinensis*	Sciuridae	A
6426a		Sheet of 5 + label		
6427	12l	Eurasian Red Squirrel, *Sciurus vulgaris*	Sciuridae	A
6427a		Sheet of 5 + label		

UNITED STATES **2020 October 16** (Winter Scenes) Set/10

5532	(55c)	Mule Deer, *Odocoileus hemionus*	Cervidae	A
5539	(55c)	Desert Cottontail, *Sylvilagus audubonii*	Leporidae	A
5541	(55c)	Belgian Draft Horse, *Equus caballus*	Equidae	A

Jersey Sea Life

Europa stamps, bearing the official logo, are issued every year by the members of PostEurop, the trade association which represents the interests of European public postal operators. Each year a theme is set for members to inerpret and illustrate on a set of stamps; in 2021 the theme is Endangered National Wildlife.

As an island, Jersey is both a home and a resting point for a multitude of bird and sea creatures. Six species of marine life that have been spotted in the waters and around the coastal area of Jersey have been featured across this set of stamps. The animals have been painted by natural science illustrator Sara Menon. The 54p and £1.05 stamps feature the Europa logo.

Printed by four color offset lithography in sheets of 10. The animals featured are thei Atlantic puffin (54p), loggerhead turtle (70p), orcas (84p), bottlenose dolphins (88p), balearic shearwater (£1.05) and grey seal (£1.18). The date of issue is 11 March 2021.

https://jerseystamps.com/collections/europa-2021-endangered-national-wildlife-jersey-seabirds-marine-life

ORNITHOLOGY

Editor

Glenn G. Mertz, BU 1455

Corrections/Updates

CARIBBEAN NETHERLANDS, V69(4), page 247
Update: In listing the 24 stamps for the date of 2018, June 19, I missed listing one of the stamps. It is the Brown Booby, *Sula leucogaster*, in family of Sulidae. It should have followed the Osprey.

DJIBOUTI, V69(2), page 110
Update: Scott has assigned numbers to the following issues.

Kingfishers, (Set/4=1880a-d) (SS/1=1890)
Raptor, (Set/4-1881a-d)) (SS/1-1891)
Water Birds, (Set/4=1882a-d) (SS/1=1892)
The Antarctic, (Set/4=1885b,d) (SS/1=1895)

GUINEA-BISSAU, V61(1), page 42
Update: A sheet of six stamps + three labels issued 10/25/05 and a SS, still not assigned Scott numbers. The six stamps on the sheet were not previously identified as a Besra, Accipiter virgatus, and the stamp on the SS is a Crested Goshawk, *Accipiter trivirgatus*. Both are in the family of Accipitridae

TOGO, V62(1), page 33
Update: Add a SS, no Sc# to the issue for the theme of "Air Pollution and Birds" issue of 2/15/2011. The bird on the stamp, a 3000f value, is a Spanish Eagle, *Aquila adalberti*, family of Accipitridae: I missed it at the time of listing when I first signed on as author of Ornithology and am trying to catch-up on all the older issues previously listed after the prior author resigned.

New issues

Scott#	Denom	Commonname/Scientific Name	Family/Subfamily	Code
ANTIGUA		**2020 June 3**	Set/4, SS/1	A*
3558a	$1.00	Turkey Vulture, *Cathartes aura* (in flight)	Cathartidae	
3558b	$1.00	Same species, landing		
3558c	$1.50	Same species, standing in tall grass		
3558d	$2.00	Same species, head only		
3559	$14.00	SS Same species, on a roof		
		2020 June 3 (Exotic Birds)	Set/4. SS/1	A*
3566a	$2.00	American Flamingo, *Phoenicopterus ruber* (on beach)	Phoenicopteridae	
3566b	$3.00	Same species, in pink		
3566c	$4.00	Same species, with head turned back		
3566d	$5.00	Same species, standing on one leg		
3567	$14.00	SS Same species, mother and chick		

ARGENTINA **1995** (Fauna Type II of 1995) A*

1889 $0.25 King Penguin, *Aptenodytes patagonicus* (16mm tall) Spheniscidae
1889a $0.25 Same species, 17mm tall

AUSTRALIA **2020 August 4**(Wildlife Recovery) Set/6 A*

5176 $1.10 Regent Honeyeater, *Anthochaera phrygia* V69(3) Meliphagidae

2020 September 7 (Art on Water Towers) Set/4 A*

5196 $1.10 Sacred Kingfisher, *Todiramphu sanctus* Alcedinidae
5200 $1.10 Same species, S/A
5200a Booklet pane of 10

BAHAMAS **2019 October 10** (60th Anniv. Bahamas National Trust) Set/4 A*

1507 15c Cuban Parrot, *Amazona leucocephala* Psittacidae
1510 70c American Flamingo, *Phoenicopterus ruber* Phoenicopteridae

BELARUS **2020 March 3** Single A*

1172 (1,86r) Western Capercaillie, *Tetrao urogallu*s Phasianidae

BELGIUM **2020 January 27** (Registration) Single A*

F7 (€5.67) Barnacle Goose, *Branta leucopsis* Anatidae

2020 March 16 (Acknowledgement of Receipt) Single A*

H2 (€1.36) Common Goldeneye, *Bucephala clangula* Anatidae

CARIBBEAN NETHERLANDS **2020 July 1** A*

Inscribed "Bonaire" Set/5

116a 75c Bananaquit, *Coereba flaveola* Thraupidae
116b 75c Tropical Mockingbird, *Mimus gilvus* Mimidae
116c 75c Carib Grackle, *Quiscalus lugubris* Icteridae
116d 75c Brown-throated Parakeet, *Eupsittula pertina*x Psittacidae
116e 75c Venezuelan Troupial, *Icterus icterus* Icteridae

Inscribed "Saba" Set/5

117a 75c Brown Pelican, *Pelecanus occidentalis* Pelecanidae
117b 75c Bridled Tern, *Onychoprion anaethetus* Laridae
117c 75c Black-hooded Oriole, *Oriolus xanthornus* Oriolidae
117d 75c Brown Noddy, *Anous stolidus* Laridae
17e 75c Osprey, P*andion haliaetu*s Pandionidae

Inscribed "St. Eustatius" Set/5

118a 75c American Golden Plover, *Pluvialis dominica* Charadriidae
118b 75c Whimbrel, *Numenius phaeopus* Scolopacidae
118c 75c Ruby-topaz Hummingbird, *Chrysolampis mosquitus* Trochilidae
118d 75c Northern Crested Caracara, *Caracara cheriway* Falconidae
118e 75c Yellow-billed Cuckoo, Coccyzus americanus Cuculidae

COCOS (KEELING) ISLANDS **2020 May 12** Set/3, SS/3 A*

407 $1.10 Brown Booby, *Sula leucogaster* Sulidae
408 $1.10 Red-footed Booby, *Sula sula* Sulidae
409 $1.10 Masked Booby, *Sula dactylatra* Sulidae
409a SS of 3, #407-409

COLOMBIA **2019 December 20** (Department of Caqueta) Set/12 A*

1532b 2,000p Blue-gray-Tanager, *Thraupis episcopu*s Thraupidae

2019 December 27 (Department of Putumayo, type of 2003) Set/12 A*

1533e 2,000p Blue-and-yellow Macaw, *Ara ararauna* Psittacidae

2020 March 20 (2020 Risaralda Bird Festival) Sheet/10 A*

1537a 5,000p Black-and-chestnut Eagle, *Spizaetus isidor*i Accipitridae
1537b 5,000p Subtropical Doradito, *Pseudocolopteryx acutipennis* V69(3) Tyrannidae
1537c 5,000p Andean Cock-of-the Rock, *Rupicola peruvianus* Cotingidae
1539d 5,000p Striolated Manakin, *Machaeropterus striolata* V69(3) Pipridae
1537e 5,000p Golden-headed Manakin, *Ceratopipra erythrocephala* Pipridae
1537f 5,000p Yellow-headed Brushfinch, *Atlapetes flaviceps* Passerellidae
1537g 5,000p Cauca Guan, *Penelope perspicax* Cracidae
1537h 5,000p Black-and-gold Tanager, *Bangsia melanochlamys* Thraupidae
1537i 5,000p Indigo-winged Parrot, *Hapalopsittaca fuertesi* Psittacidae

2020 June 6 (Scenes from Colombian Parks) Sheet/9 A*

1539c 500p Blue-throated Starfrontlet, *Coeligena helianthea* V69(3) Trochilidae
1539e 500p Vermilion Cardinal, *Cardinalis phoeniceus* Cardinalidae

CUBA **2019 June 5** (Animals and Landmarks in their Habitats) Set/3 A*

6168 75c Yellow-faced Grassquit, *Tiaris olivaceu*s Thraupidae

2019 June 16 (Owls) Set/6, SS/1 A*

6179 20c Barn Owl, *Tyto alba* Tytonidae
6180 40c Stygian Owl, *Asio stygius* Strigidae
6181 50c Short-eared Owl, *Asio flammeus* Strigidae
6182 75c Long-eared Owl, *Asio otus* Strigidae
6183 85c Burrowing Owl, *Athene cunicularia* Strigidae
6184 90c Bare-legged Owl, *Margarobyas lawrencii* Strigidae
6185 1p SS Cuban Pygmy Owl, Glaucidium siju Strigidae

2019 October 9 (Farm Animals) Set/6, SS/1 A*

6195 15c Mallard, *Anas platyrhynchos domesticus* Anatidae
6196 35c Red Junglefowl, *Gallus gallus* Phasianidae
61978 75c Graylag Goose, *Anser anser* Anatidae

CZECH REPUBLIC **2020 March 11** Set/3 A*

3821 B (19k) European Goldfinch, *Carduelis carduelis* (Top bird) Fringillidae
Common Chaffinch, *Fringilla coelebs* (Ctr bird) Fringillidae
Hawfinch, *Coccothraustes coccothraustes* (Bottom bird) Fringillidae
3822 B (19k) March Tit, *Poecile palustris* (Top bird) Paridae
Crested Tit, *Lophophanes cristatus* (UL) Paridae
(Stamp has genus of *Parus*)
Eurasian Blue Tit, *Cyanistes caeruleus* (CR) Paridae
(Stamp has genus of *Parus*)
Great Tit, *Parus major* (LC) Paridae

CZECH REPUBLIC (continued)

2020 June 17 Set/2 A*

3832 B (19k)	Eurasian Magpie, *Pica pica* (Top bird)	Corvidae
	Eurasian Jay, *Garrulus glandarius* (CTR bird)	Corvidae
	Common Raven, *Corvus corax* (LCTR)	Corvidae
3833 B (19k)	European Robin, *Erithacus rubecula* (Top bird)	Muscicapidae
	Common Redstart, *Phoenicurus phoenicurus* (CTR bird)	Muscicapidae
	Fieldfare, *Turdus pilaris* (LL)	Turdidae

DJIBOUTI **2020 April 27** (NZ 2020 International Stamp Exhibition) Set/4, SS/1 A*

N/A	250fd	North Island Brown Kiwi, *Apteryx mantelli*	Apterygidae
N/A	250fd	Southern Brown Kiwi, *Apteryx australis*	Apterygidae
N/A	250fd	Little Spotted Kiwi, *Apteryx owenii*	Apterygidae
N/A	250fd	Okarito Brown Kiwi, *Apteryx rowi*	Apterygidae

ESTONIA **2020 April 30** Single A*

923	65v	Great Crested Grebe, *Podiceps cristatus*	Podicipedidae

FALKLAND ISLANDS **2020 August 10** (Stamps and Coins) Set/5 A*

1268	32p	Southern Rockhopper Penguin, *Eudyptes chrysocome*	Spheniscidae
1269	68p	King Penguin, *Aptenodytes patagonicus*	Spheniscidae
1270	70p	Magellanic Penguin, *Spheniscus magellanicus*	Spheniscidae
1271	£1.04	Gentoo Penguin, *Pygoscelis papua*	Spheniscidae
1272	£1.26	Macaroni Penguin, *Eudyptes chrysolophus*	Spheniscidae

2020 October 1 (Mike Peake Birds) A*

1277	32p	Black-necked Swan, *Cygnus melancoryphus*	Anatidae
1278	49p	Black-crowned Night-Heron, *Nycticorax nycticorax*	Ardeidae
1279	78p	Upland Goose, *Chloephaga picta*	Anatidae
1280	£1.04	Kelp Gull, *Larus dominicanus*	Laridae
1281	£1.26	Variable Hawk, *Geranoaetus polyosoma*	Accipitridae
1282	£1.35	Upland Goose, *Chloephaga picta*	Anatidae

FINLAND (Åland) **2019**

A set of four "frama" S.A. stamps, featuring four different woodpecker species, each with a 1,60€ value, machine printed in 2019. Martin Frankevicz, New Issues Editor at Scott Publishing, informed me that these stamps will not is issued a Scott number as they do not list "frama" stamps in their stamp catalog. This is the first time I've ever received "frama" machine issued stamps, but will list them here.

NV	1,60€	Great Spotted Woodpecker, *Dendrocopos major*	Picidae
NV	1,60€	Lesser Spotted Woodpecker, *Dendrocopos minor*	Picidae
NV	1,60€	Black Woodpecker, *Dryocopus martius*	Picidae
NV	1,60€	Gray-headed Woodpecker, *Picus canus*	Picidae

FRANCE **2020 March 6** (Curiosities) Set/12 A*

5803	(97c)	Burrowing Owl, *Athene cunicularia*	Strigidae

2020 April 3 (Bird Eggs) Set/12 A*

5817	(97c)	Common Kestrel, *Falco tinnunculus*	Falconidae
5818	(97c)	Carrion Crow, *Corvus corone*	Corvidae

FRANCE (continued)

5819	(97c)	Spotted Flycatcher, *Muscicapa striat*	Muscicapidae
5820	(97c)	Ostrich, *Struthio camelus*	Struthionidae
5821	(97c)	Barn Swallow, *Hirundo rustica*	Hirundinidae
5822	(97c)	Rock Bunting, *Emberiza cia*	Emberizidae
5823	(97c)	House Sparrow, *Passer domesticus*	Passeridae
5824	(97c)	Song Thrush, *Turdus philomelos*	Turdidae
5825	(97c)	Red Junglefowl, *Gallus gallus*	Phasianidae
5826	(97c)	Wild Turkey, *Meleagris gallopavo*	Phasianidae
5827	(97c)	Northern Lapwing, *Vanellus vanellus*	Charadriidae
5828	(97c)	Emu, *Dromaius novaehollandiae*	Casuariidae

GUINEA **2019 December 11** (Sea Birds) Set/4, SS/1 A*

N/A	12,500fr		European Shag, *Phalacrocorax aristotelis*	Phalacrocoracidae
N/A	12,500fr		Black-browed Albatross, *Thalassarche melanophris*	Diomedeidae
N/A	12,500fr		Northern Fulmar, *Fulmarus glacialis*	Procellariidae
N/A	12,500fr		Blue-footed Booby, *Sula nebouxii*	Sulidae
N/A	50,000fr	SS	Atlantic Puffin, *Fratercula arctica*	Alcidae
Margin			Thick-billed Murre, *Uria aalge* (LR)	Alcidae
			Wandering Albatross, *Diomedea exulans* (UR)	Diomedeidae

JAPAN **2020 February 7** (Miyakojima Tourist Attractions) Set/5 A*

4375b	84¥	Ruddy Kingfisher, *Halcyon coromanda*	Alcedinidae

2020 June 10 (Flora and fauna of Iriomote Island) Set/10 A*

4404a	84¥	Crested Serpent Eagle, *Spilornis cheela*	Accipitridae
4404b	84¥	Ruddy Kingfisher, *Halcyon coromanda*	Alcedinidae
4404c	84¥	Ryukyu Scops-Owl, *Otus elegans*	Strigidae

2020 July 17 (Protection of Historic Sites and National Monuments) Set/10 A*

4411j	84¥	Oriental Stork, *Ciconia boyciana*	Ciconiidae

2020 June 19 (Traditional Colors) Sheet/10 S/A A*

4407h	63¥	Common Kingfisher, *Alcedo atthis*	Alcedinidae

LATVIA **2020 June 19** Set/2 A*

1052	€1.27	Hazel Grouse, *Tetrastes bonasia*	Phasianidae
1053	€2.14	Common Kingfisher, *Alcedo atthis*	Alcedinidae

MARSHALL ISLANDS **2019 May 22** (Sacred Kingfisher) Set/4, SS/1 A*

1239a	$2.00		Sacred Kingfisher, *Todiramphus sanctua* (Facing left, dark background)	Alcedinidae
1239b	$2.00		Same species, facing right, on perch	
1239c	$2.00		Same species, facing left, on branch, light background	
1239d	$2.00		Same species, facing left, legs not visible	
1240	$5.00	SS	Same species	

NAMIBIA **2019 April 25** (Cuckoos) Set/4 A*

1386	($8.40)		African Cuckoo, *Cuculus gularis* (Inscribed "Postcard Rate")	Cuculidae

NAMIBIA (continued)

1387	($8.60)	Dideric Cuckoo, *Chrysococcyx caprius* (Inscribed "Zone B")	Cuculidae
1388	($32.00)	Jacobin Cuckoo, *Clamator jacobinus* (Inscribed "Registered Mail)	Cuculidae
1389	($36.60)	Great Spotted Cuckoo, *Clamator glandarius* (Inscribed "Inland Registered Mail)	Cuculidae

NETHERLANDS **2020 January 20** (Owls and Birds of Prey") Set/10 A*

1601a	(91c)	Osprey, *Pandion haliaetus*	Pandionidae
1601b	(91c)	European Honey-Buzzard, *Pernis apivorus*	Accipitridae
1601c	(91c)	Red Kite, *Milvus milvus*	Accipitridae
1601d	(91c)	Short-eared Owl, *Asio flammeus*	Strigidae
1601e	(91c)	Montagu's Harrier, *Circus pygargus*	Accipitridae
1601f	(91c)	Common Kestrel, *Falco tinnunculus*	Falconidae
1601g	(91c)	Hen Harrier, *Circus cyaneus*	Accipitridae
1601h	(91c)	Eurasian Hobby, *Falco subbuteo*	Falconidae
1601i	(91c)	Long-eared Owl, *Asio otus*	Strigidae
1601j	(91c)	White-tailed Eagle, *Haliaeetus albicilla*	Accipitridae

NORWAY **2019 April 11** (Europa) Single A*

1868	(21k)	White-throated Dipper, *Cinclus cinclus*	Cinclidae

PALAU **2018 December 19** (Beautiful Birds) Sheet/6, sheet/4, SS/1 A*

1404a	$0.25	Scaly-breasted Munia, *Lonchura punctulata* (Stamp has Nutmeg Mannikin, which was renamed to the Current name)	Estrildidae
1404b	$0.50	Slaty-legged Crake, *Rallina eurizonoides*	Rallidae
1404c	$0.75	Red-legged Crake, *Rallina fasciata*	Rallidae
1404d	$1.00	Western Yellow Wagtail, *Motacilla flava*	Motacillidae
1404e	$1.50	Nicobar Pigeon, *Caloenas nicobarica*	Columbidae
1404f	$2.00	Palau Flycatcher, *Myiagra erythrop*s	Monarchidae
1405a	$.50	Buff-banded Rail, *Gallirallus philippensi*s	Rallidae
1405b	$1.00	Micronesian Myzomela, *Myzomela rubratra*	Meliphagidae
1405c	$2.00	Same species	
1405d	$3.00	Same species as $.50 value	
1406	$4.00 SS	Caroline Islands White-eye, *Zosterops semperi*	Zosteropidae

ROMANIA **2020 May 22** (Pheasants) Set/4 + label A*

6420	1.90l	Golden Pheasant, *Chrysolophus pictus*	Phasianidae
6421	5l	Lady Amherst's Pheasant, *Chrysolophus amherstiae*	Phasianidae
6422	8.50l	Reeves's Pheasant, *Syrmaticus reevesi*i	Phasianidae
6423	12l	Ring-necked Pheasant, *Phasianus colchicus*	Phasianidae

SIERRA LEONE **2020 January 30** (Owls) Set/5, SS/2 A*

N/A	10,000le	Little Owl, *Athene noctua*	Strigidae
N/A	10,000le	Barn Own, *Tyto alba*	Tytonidae
N/A	10,000le	Long-eared Owl, *Asio otus*	Strigidae

SIERRA LEONE (continued)

N/A	20,000le	Snowy Owl, *Bubo scandiacus*	Strigidae	
	Label	Long-eared Owl, *Asio otus*	Strigidae	
N/A	20.000le	Great Gray Owl, *Strix nebulosa*	Strigidae	
N/A	20,000le	SS Snowy Owl, *Bubo scandiacus* (LS)	Strigidae	
N/A	20,000le	SS Great Gray Owl, *Strix nebulosa* (RS)	Strigidae	
	Margin	Great Horned Owl, *Bubo virginianus*	Strigidae	
		2020 January 30 (Endangered Species) Set/5		A*
N/A	20,000le	Galapagos Penguin, *Spheniscus mendiculus*	Spheniscidae	
N/A	20,000le	SS Same species (RS) as on the sheet of five	Spheniscidae	

UZBEKISTAN		**2020 February 5** (Bird type of 2017) Set/2		A*
880	1600s	Common Quail, *Coturnix coturnix*	Phasianidae	
881	3200s	Eurasian Magpie, *Pica pica*	Corvidae	

Color-omitted Error on U.S. Coral Reef Stamps

In the February 22 issue of *Linn's Stamp News*, Charles Snee reported on the discovery of a color-missing error in the coil postcard stamps with the Coral Reef designs (Scott #5367-70). A dealer in Michigan, David Testa special ordered two rolls of 100 coil stamps from his post office. He separated them into coil-number strips of 5 without noticing anything. Later, going through them, he noticed that the lettering "Postcard" was missing. On closer examination, the plate number for one of the colors was also missing. The missing color, according to *Linn's*, is Pantone Matching System 2234C Aqua. Testa submitted a strip of 5 to Linn's and they verified the missing color error in consultation with the editors of the *Scott Catalogue*. There will be an entry in the *Scott Catalogue* for the error. Testa used some of the stamps to mail orders to his customers, but still has 91 of them on hand.

https://www.linns.com/news/us-stamps-postal-history/michigan-dealer-discovers-color-omitted-error-on-2019-u.s.-coral-reefs-coil-stamps

New Birds in the Philatelic Aviary

By Charles E. Braun, BU 1364

New Birds

IBEROMESORNIS, ***Iberomesornis romorali*** Iberomesornithidae
Guinea-Bissau, 2020, not yet cataloged, 500 fr Extinct 120,000,000 BCE

Length: 4 inches, sexes alike, resident. A carnivorous bird descendant of Archaeopteryx, the earliest bird. It was the first bird with a perching foot.
Habitat: Dense forest.
Range: Spain.
Reference: Sanz, J. L and J. F. Bonaparte. Unusual Early Cretaceous Bird. Nature vol 331, pages 433-435 (1988).

STIRTON'S THUNDERBIRD, ***Dromornis stirtoni*** Dromornithidae
Guinea-Bissau, 2020, not yet cataloged, 750 fr Extinct 30,000 BCE

Length: 5 feet, sexes alike, resident. A huge 1100-pound, 10-foot-tall flightless bird with a long beak. Habitat: Subtropical open woodlands.
Range: Northern Australia.
Reference: Rich, P. The Dromornithidae, Geology and Geophysics, vol 184, pages 1-196.

GIANT TERATOM, ***Argentavis magnificans*** Teratornithidae
Guinea-Bissau, 2020, not yet cataloged, 100 fr Extinct 6,000,000 BCE

Length: 11 feet, 6 inches, sexes alike, resident. The largest flying bird, with a wingspan of 23 feet.
Habitat: Open country.
Range: Central and northwestern Argentina.
Reference: Alexander, David E. Proceedings of the National Academy of Sciences of the United States of America, vol 104, pages 12233 and 12234.

EMPEROR GOOSE, ***Anser canagicus*** Anatidae
Marshall Islands, 2020, not yet cataloged, $1.50 Previously on a US duck stamp.

Length: 26 to 38 inches, sexes alike, migratory. Black, with a white hindneck and tail.
Habitat: Breeds in open Arctic tundra near water; winters along coasts.
Range: Breeds in northeastern Siberia and western Alaska; winters in northern Pacific coasts.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 1.

WESTERN PLANTAIN-EATER, ***Crinifer piscitor*** Muscophagidae

Sierra Leone, 2020, not yet cataloged, 14,500 le Previously on a Staffa local.

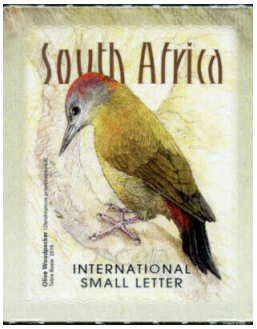
Length: 20 inches (10-inch tail), sexes alike, resident. Gray above and streaked white below, with a dark brown head and upper breast and a yellow bill.
Habitat: Open wooded savanna and cultivation.
Range: Senegal to the Central African Republic and the Congo River.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 4.

CROZET SHAG, *Phalacrocorax melanogenis* Phalacrocoracidae
French Antarctic Territory, 2021, not yet cataloged, 1 euro

Length: 24 inches, sexes alike, resident. Black above and white below, with white wing patches.
Habitat: Marine, near coasts.
Range: Crozet Island and Prince Edward Island, southern Indian Ocean.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 1.

KNYSNA WOODPECKER, ***Campethera notata*** Picidae
South Africa, 2020, not yet cataloged, international small letter

Length: 8 to 9 inches, resident. The male (shown on the stamp) is yellow-spotted green above and dark-spotted white below,with a red crown and mustache; the female has a red nape and a black mustache.
Habitat: Forest, woodland and scrub.
Range: Southern South Africa.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 7.



OLIVE WOODPECKER, ***Chloropicus griseocephalu***s Picidae
South Africa, 2020, not yet cataloged, international small letter

Length: 8 inches, resident. The male (shown on the stamp) is dull olive-green above and bronze-olive below, with a red crown and belly patch.; the female has a gray crown.
Habitat: Forest and bushes.
Range: Angola and Namibia to northern Malawi and southern and western South Africa.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 7.

HAMMOND'S FLYCATCHER, ***Empidonax hammondii*** Tyrannidae

Grenada, 2020, not yet cataloged, $14

Length: 5 to 6 inches, sexes similar, migratory. Grayish-olive above and grayish below, with two white wingbars and a white eyering.
Range: Breeds from east-central Alaska to north-central New Mexico; winters from southern Arizona to north-central Nicaragua.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 9.

REUNION CUCKOOSHRIKE, ***Lalage newtoni*** Campiphagidae

France, 2021, not yet cataloged, 1.08 euros

Length: 9 inches, resident. The male (shown on the stamp) is ashy-gray above and pale gray below; the female is rusty-brown above and finely barred whitish below with a narrow white eyebrow.
Habitat: Canopy of closed montane moist forest.
Range: Northwestern Reunion Island, southern Indian Ocean.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 10.

VERREAUX'S BATIS, ***Batis minima*** Platysteiridae

Central African Republic, 2020, not yet cataloged, 850 f

Length: 4 inches, resident. The male (shown on the stamp) is black above and white below, with a white wing stripe and a black breastband: the female has a gray breastband.
Habitat: Forest edge.
Range: Southern Cameroon and Gabon to the Central African Republic.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 11.

RUFOUS-BACKED FANTAIL, ***Rhipidura rufidorsa*** Rhipiduridae

Solomon Islands, 2020, not yet cataloged, $9.00

Length: 5 inches, sexes alike, resident. Rufous above and mottled gray below, with a gray head and nape and a whitish throat.
Habitat: Forest interior.
Range: New Guinea.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 11.

BRONZED DRONGO, ***Dicrurus aeneus*** Dicruridae

Sierra Leone. 2020. not yet cataloged, 14,500 le

Length: 9 inches, sexes similar, resident. Glossy black, with a deeply forked tail.
Habitat: Forest and woodlands.

Range: India to Taiwan and Borneo.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 14.

GLOSSY DRONGO, ***Dicrurus divaricatus*** Dicruridae
Sierra Leone, 2020, not yet cataloged, 14,500 le

Length: 9 inches, sexes similar, resident. Glossy black, with a forked tail.
Habitat: Forest and woodlands.
Range: Senegal to Eritrea, Somalia, and western Kenya.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 14.

CAMBODIAN TAILORBIRD, ***Orthotomus chakormuk*** Cisticolidae
Cambodia, 2020. not yet cataloged, 2000 r

Length: 4 inches, resident. The male (shown on the stamp) is slate gray above and white below, with an orange crown and patchy black throat: the female lacks the black throat.
Habitat: Dense scrub.
Range: Southeastern Cambodia.
Reference: Mahood, S. J., et al. Forktail. vol 29, pages 1-14.

PAGAN REED-WARBLER, ***Acrocephalus yamashinae*** Acrocephalidae
Central African Republic, 2020, not yet cataloged, 850 fr Extinct around 1970

Length: 7 inches, sexes similar, resident. Dark rusty brown above and light yellow to cream below, with a yellow supercilium and a black eyestripe.
Habitat: Mangroves and marshes.
Range: Pagan Island, Marianas.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 11.

HONEYGUIDE GREENBUL, ***Baeopogon indicato***r Pycnonotidae
Togo. 2020, not yet cataloged, 800 fr

Length: 8 inches, resident. The male (shown on the stamp) is greenish-olive above and olive gray below, with pale eyes, creamy belly and white outer tail; the female has brown eyes.
Habitat: Forest, forest patches and plantations.
Range: Western Guinea to western Kenya and northern Angola.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 10.

BOOTED WARBLER, ***Iduna caligata*** Sylviidae

Djibouti, 2020, not yet cataloged, 250 fr

Length: 5 inches, sees alike, migratory. Grayish-brown above and off-white below, with a whitish supercilium.
Habitat: Breeds in low scrub, bushes and weeds; winters in taller vegetation and bushes.
Range: Breeds from western Russia to northwestern China; winters in eastern India.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 11.

BRONZE-TAILED GLOSSY STARLING, ***Lamprotornis chalcurus***
Sturnidae

Sierra Leone, 2020, not yet cataloged, 58,000 le

Length: 8 inches, sexes alike, resident. Iridescent blue-green above and purple below, with purple ear-patches and epaulets.
Habitat: Woodland, bushes and cultivated areas.
Range: Senegal to western Kenya.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 14.

FOREST ROBIN, ***Stiphornis erythrothorax***
Muscicapidae
Central African Republic, 2020, not yet cataloged, 3300 fr

Length: 5 inches, sexes similar, resident. Slate gray above and white below, with a bright orange breast and a white spot in front of the eye.
Habitat: Forest.
Range: Sierra Leone to northeastern Gabon and southern Uganda.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 10.

MARTINIQUE ORIOLE, ***Icterus bonana*** Icteridae
France, 2021, not yet cataloged, €1.08

Length: 7 to 8 inches, sexes similar, resident. Black above and orange-tawny below, with a dark chestnut head and breast and orange-tawny epaulets.
Habitat: Dry forest and mangroves.
Range: Martinique, central Antilles.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 16.

HERPETOLOGY

Editor Dick Roman, LM 83

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.

New issues

Scott#	Denom	Commonname/Scientific Name	Family/Subfamily	Code
ALGERIA		**2019 May 11** (Protected Species)		
1786b	25d	Unidentified cobra		
ANTIGUA		**2020 January 15** (American Crocodiles)		
3563a	$4.00	American crocodile, *Crocodylus acutus*	Crocodylidae	A
3563b	$5.50	Same species		
3563c	$6.00	Same species		
3563d	$6.50	Same species		
AUSTRALIA		**2020 May 19** (Citizen science)		
5148	$1.10	stylized frog		
5152	$1.10	same species		
		2020 August 4 (Wildlife Recovery) Set/6		
5174	$1.10	Davies' tree frog, *Litoria daviesae*	Hylidae, Hylinae	A
5177	$1.10	Blue Mountains Swamp-skink, *Eulamprus leuraensis*	Scincidae, Sphenomorphinae	A
5178a	SS	$1.10 Same species		
5180	$1.10	Davies' tree frog, *Litoria daviesae*	Hylidae, Hylinae	A
5180a		Booklet of 10 same species		
5183	$1.10	Blue Mountains Swamp-skink, *Eulamprus leuraens*is	Scincidae, Sphenomorphinae	A
5183a		Booklet of 10 same species		
		2020 September 7 (Watertower Art) Set/4 Perf 14x14¾		
5198	$1.10	Eastern bearded dragon, *Pogona barbata*	Agamidae, Amphibolurinae	A
5199a	$1.10	booklet of 10 same species		
		S/A die cut 11¼		
5202	$1.10	Eastern bearded dragon, *Pogona barbata*	Agamidae, Amphibolurinae	A
5202a	$1.10	Booklet of 10 same species		
BELGIUM		**2020 August 31** (Animals) Set/10		
2924	1 (98c)	Green Frog, R*ana clamitans*	Ranidae	A
2927a		Block of 10, #2918-27		
BHUTAN		**2020 February 7** (New Year 2020 Year of the Rat)		
1609f	30nu	zodiac stylized snake		
CARIBBEAN NETHERLANDS				
Inscribed "Bonaire"		**2020 July 1** (Marine Life) Set/5		
122		Horiz strip of 5		

CARIBBEAN NETHERLANDS (continued)

122b 75c Green Sea Turtle, *Chelonia mydas* Cheloniidae, Cheloniinae A

Inscribed "Saba" **2020 July 1** (Marine Life) Set/5

123 Horiz strip of 5

123e 75c Leatherback Sea Turtle, *Dermochelys coriacea* Dermochelyidae A

Inscribed "St. Eustatius" **2020 July 1** (Marine Life) Set/5

124 Horiz strip of 5

124d 75c Hawksbill Sea Turtle, *Eretmochelys imbricata* Cheloniidae A

CHRISTMAS ISLAND **2020 Jauary 8** (Year of the rat) Single

592k $1 Stylized zodiac snake B

2020 October 30 (Christmas) Set/2, SS/2 x2

599 $2.20 Stylized giant geckos B

599a Souvenir sheet of 2 #598-99

600 $2.20 Stylized giant geckos B

600a Booklet pane of 5

COLOMBIA **2020 June 6** (Colombian Parks) Sheet/9

1539a 500p South American River Turtle, *Podocnemis expansa* Podocnemididae A

CUBA **2019 June 5** (Animals and Landmarks) Set/3

6167 65c Cuban Brown Curlytail, *Leiocephalus cubensis* Leiocephalidae, Iguania A

6169 2.05p Oriente Mottled Frog, *Eleutherodactylus simulans* Brachycephalidae A

FRANCE **2019 November 9** (Tromelin Island, French and Antarctic Terr) Single

5760 €1.30 Unidentified turtle B

2020 February 7 (Animals and their reflections in Water) Set/12

5791 97c Common Green Frog, *Hylarana erythraea* Ranidae A

5794a 97c Same species

GRENADA **2020 January 29** (Wildlife of Madagascar) Set/4, SS/1

4348a $4 Satanic leaf-tailed gecko, *Uroplatus phantasticus* Gekkonidae A

4348b $4 Reunion Chameleon, Panther chameleon, *Furcifer pardalis* Chamaeleonidae A

GRENADA GRENADINES **2019 December 24** (Lizards) Set/4, SS/1

3029a $2 Gold Dust Day Gecko, *Phelsuma laticauda* Gekkonidae A

3029a $3 Turks and Caicos Rock Iguana, *Cyclura carinata* Iguanidae, Iguania A

3029a $4 Gold Dust Day Gecko, *Phelsuma laticauda* Gekkonidae A

3029a $5 Turks and Caicos Rock Iguana, *Cyclura carinata* Iguanidae, Iguania A

3030 $14 Desert spiny lizard, *Sceloporus magister* Phrynosomatidae, Sceloporinae A

INDIA **2019 December 26** (Directorate of Revenue Intelligence) Single

3199 5r Unidentified turtle, stylized

JAPAN **2020 February 7** (Tourist Attractions) Set/10

4375 Sheet of 5

4375e 84¥ Green Sea Turtle, *Chelonia mydas* Cheloniidae, Cheloniinae A

2020 June 10 (Flora and Fauna of Iriomote Island) Set/10

4404 Sheet of 10

4404e 84¥ Indochinese Box Turtle, *Cuora galbinifrons* Geoemydidae A

MACAO **2020 October 9** (Protected animals) Set/4, SS/1

1614c 4.50p Hawksbill Sea Turtle, *Eretmochelys imbricata* Cheloniidae A
1615 13p Same species

MEXICO **2020** (Folk Art, type of 2005) Set/13

3168 7.50p Obsidian and opal turtle statue A

ROMANIA **2020 January 23** (Year of the Rat) Set/1, SS/1

6374 28.50l Stylized zodiac snake B SS Z

2020 July 2 (Spotted animals) Set/4 plus labels

6438 1.90l Leopard Tortoise, *Stigmochelys pardalis* Testudinidae A
6438a Sheet of 5 with label
6441 12.00l European Ratsnake, *Zamenis situla* Colubridae, Colubrinae A
6441a Sheet of 5 with label

SAMOA **2018 April** (Scott #1073 surcharged) Set/5

1289 50s on 90s Stylized turtle A

SYRIA **2019** (Decorated Urn) Set/6

1805 £5 Stylized lizard on vase
1806 £10 Same species
1807 £25 Same species
1808 £50 Same species
1809 £100 Same species
1810 £155 Same species

THAILAND **2019 September 11** (WWF) Set/4

3080 3b Leatherback Sea Turtle, *Dermochelys coriacea* Dermochelyidae A

TRISTAN DA CUNHA **2019 November 19** (Vagrant Species) Set/4

1167 £1 Loggerhead Sea Turtle, *Caretta caretta* Cheloniidae A

ICHTHYOLOGY

Editor

J. Dale Shively, BU 1832

New Listings

Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
ANDORRA (French Admin.)		**2020 June 19** (*Oncorhynchus mykiss*) Single		
822	€1.16	Rainbow Trout, *Oncorhynchus mykiss* (w/skeletonized version)	Salmonidae	A
AUSTRALIA		**2020 May 19** (Citizen Science) Single/Bklt/10 & SS/1, Perf. 14x14¾		
5149	$1.10	LR: Ngukurr Wi Stadi Bla Kantri ("We study the country") stylized fish		U B S
No Sc#		(Sc# 5148-5151) (SS/1) (2020 Yearbook Exclusive)		
No Sc#		(Sc# 5149) (Commemorative Stamp Pack) w/same design in packet background		
5153	$1.10	(Sc# 5149) Serpentine die cut 11¼ syncopate		U B S
5153a	Bklt/10			
		2020 September 7 (Art on Water Towers) Single, SS/4 & Bklt/10, Perf. 14¾x14		
5196	$1.10	Jenny McCracken, "Lucky Dip" with duck diving for U/I fish (LL)		C
5196a	SS/4	(Sc# 5196-5199, 1 ea)		C
5200		(Sc# 5196, Bklt) Serpentine die cut 11¼ syncopate		C
5200a		Bklt/10		
BHUTAN		**2020 February 7** (New Year 2020 - Year of the Rat) SS/1		
1610	Margin	R: Stylized fish		S Z
BOSNIA & HERZEGOVINA		**2019 December 5** (Fish) Strip/4 & Blk/4		
NOTE: Sc# 631 printed in sheets of 8 stamps; two tete-beche strips. Margins contain tail fin/barbel extensions of each species of the 4 species 631(a-d).				
631a	90pf	Barbel, *Barbus barbus*	Cyprinidae	A
631b	90pf	European Perch, *Perca fluviatilis*	Percidae	A
631c	90pf	Pike-perch, *Sander lucioperca*	Percidae	A
631d	90pf	Wels catfish, *Silurus glanis*	Siluridae	A
631	Margin	Sheet/8 UL/UR/LR/LL: Fins/barbels of each species 631(a-b) Stylized fish		
BRAZIL		**2017 November 10** (Characters from "The Steadfast Tin Soldier" H. C. Andersen) Strip/4		
3369d	1.85r	Stylized fish		X
CARIBBEAN NETHERLANDS		**2020 July 1** (Marine Life) Horiz. Strip/5		
122	Strip/5	Sc# 122 a-e		
122c	75c	Lionfish, *Pterois sp.*	Scorpaenidae	A
122e	75c	Parrotfish sp.	Scaridae	A
123	Strip/5	Sc# 123 a-e		
123a	75c	Blue Tang Surgeonfish, *Acanthurus coeruleus*	Acanthuridae	A

CARIBBEAN NETHERLANDS (continued)

123c	75c	French Angelfish, *Pomacanthus paru*	Pomacentridae	A
123d	75c	Grey Reef Shark, *Carcharhinus amblyrhynchos*	Carcharhinidae	A
124	Strip/5	Sc# 124 a-e		
124a	75c	Stingray sp.	Dasyatidae	A
124b	75c	Coney, *Cephalopholis fulva*	Serranidae	A
124c	75c	Great Barracuda, *Sphyraena barracuda*	Sphyraenidae	A
124e	75c	Yellowfin Tuna, *Thunnus albacares*	Scombridae	A

CHINA (Taiwan) **2020 February 26** (*Carassius* (Goldfish) variants) Set/4

4523	$6	Red Crane Crest Oranda, *Carassius auratus*	Cyprinidae	A
4524	$9	Ranchu, *Carassius auratus*	Cyprinidae	A
4525	$15	Broadtail Ryukin, *Carassius auratus*	Cyprinidae	A
4526	$17	Pompons, *Carassius auratus*	Cyprinidae	A

COLOMBIA **2020 June 6** (Columbian Parks,Malpel Flora and Fauna Sanctuary) Sheet/9

1539g	500p	Scalloped Hammerhead, *Sphyrna lewini*	Sphyrnidae	A

COOK ISLANDS **1998?** (Marine Life, Sc# 1158 & 1161 Ovpt) Sheet/4

Note: Newly discovered ovpt. Year of issue is unknown. A damaged example of Sc# 1178 exists uncanceled. Sc# 1158 & 1161 are like Sc# 1062 & 1065 printed in 1992-94. See article in Linn's Stamp News, 2020 December 21, p.56).

1177 10c on 15c Black & Gold Angelfish (Bicolor Angelfish), *Centropyge bicolor* Pomacanthidae A

1178 20c on 25c Black-tipped Cod (Blacktip Grouper), *Epinephelus fasciatus* Serranidae A

COSTA RICA **2019 December 2** (Fish – Postal Tax) Horiz. Strip/4

RA138a	70col	Whale shark, *Rhincodon typus*	Rhincodontidae	A
RA138b	70col	Scalloped Hammerhead, *Sphyrna lewini*	Sphyrnidae	A
RA138c	70col	Giant Manta, *Mobula birostris*	Myliobatidae	A
RA138d	70col	Common Sawfish, *Pristis pristis*	Pristidae	A

DJIBOUTI **2019 December 12** (Kingfishers) Sheet/4, SS/1

1880c	250fr	Pied Kingfisher, *Ceryle rudis* with U/I fish	U C
1890	Margin	Cerulean Kingfisher, *Alcedo coerulescens* with U/I fish	U C

2019 December 12 (Aquatic Birds) Sheet/4, SS/1

1882b	250fr	Eastern Great Egret, *Ardea alba modesta* with U/I fish	U C

2019 December 12 (Fish) Sheet/4, SS/1

1884a	250fr	Cockatoo Cichlid, *Apistogramma cacatuoides*	Cichlidae	A
1884b	250fr	Emperor Angelfish, *Pomacanthus imperator*	Pomacanthidae	A
1884c	250fr	Palette Surgeonfish, *Paracanthurus hepatus*	Acanthuridae	A
1884d	250fr	Copperband Butterflyfish, *Chelmon rostratu*s	Chaetodontidae	A
Margin UR:		Clown Anemonefish, *Amphiprion ocellaris*	Pomacentridae	Z
1894	1000fr	Broadbarred Firefish, *Pterois antennata*	Scorpaenidae	A SS
	Margin	UL: Titan Triggerfish, *Balistoides viridescens*	Balistidae	A SS Z
		Top CTR: Yellowface Angelfish, *Pomacanthus xanthometopon*	Pomacanthidae	A SS Z
		UR: Blue Discus, Symphysodon aequifasciatus	Cichlidae	A SS Z
		LR: Siamese Fighting Fish, *Betta splendens*	Osphronemida	A SS Z

FAROE ISLANDS **2020 September 21** (Ludwig van Beethoven, 1770-1827) SS/1
760 Margin RT: Stylized fish (head facing RT) U

FRANCE **2020 March 6** (Cabinet of Curiosities) Bklt/12
5804 97c Adriaen Van der Kabel (1631-1705), "Herring Fishing" (fish in net on skiff) C
5810a Bklt/12 (Sc# 5799-5810)

GREAT BRITAIN Guernsey **2020 July 21** (Paintings) SS/6
1552 95p Richard Le Goupillot, "Fishing Boat" (mackerel sp. in net) Scombridae C S

GRENADA GRENADINES **2019 December 24** (Saltwater Fish) SS/3 & SS1
3027a $3 Mandarinfish, *Synchiropus splendidus* Callionymidae A
3027b $5 Oscar, *Astronotus ocellatus* Cichlidae A
3027c $7 Clown Triggerfish, *Balistoides conspicillum* Balistidae A
3028 $3 Lionfish sp. Scorpaenidae A

HONG KONG **2020 August 18** (Ocean Park, Hong Kong Theme Park) Set/6, SS/1
2093a $10 UR: Stylized Seahorse Syngnathidae C S

HUNGARY **2020 August 5** (Flora and Fauna) Single
4565d 185fo Pike-perch, *Sander lucioperca* Percidae A

JAPAN **2020 January 15** (Food) Bklt/10
4366 Sheet of 10
4366a 63¥ Dried fish and garlic bulbs B U
4366g 63¥ Sea bream on plate Sparidae B
Mackerel on plate Scombridae B

2020 January 28 (National Parks) Sheet/10
4372 Sheet of 10
4372j 84¥ U/I fish at Kerama Shoto National Park U

2020 February 7 (Hakodate Tourist Attractions) Sheet/5
4374 Margin UR: Stylized tuna (2) Scombridae A S
LR: Stylized fish

2020 February 7 (Miyakojima Tourist Attraction) Sheet/5
4375 Sheet of 5
4375d 84¥ Clown Anemonefish (2), *Amphiprion ocellaris* Pomacentridae A

2020 May 20 (Doraemon Fishing) Bklt/10
4398 Booklet of 10
4398b 63¥ Doraemon (popular cartoonish earless robotic cat) w/ 2 stylized fish
Yellowfin Tuna(?), *Thunnus albacares* Scombridae B

2020 June 16 (Items of Nihonbashi Business District of Tokyo) Sheet/10
4406 Sheet of 10
4406 Margin UL: Stylized fish (3)
Perch sp.(?) Percidae A MS Z
Barracuda sp.(?) Sphyraenidae A MS Z
Flounder sp. Paralichthyidae A MS Z

JAPAN (continued)

2020 June 19 (Two Goldfish) Sheet/10

4407	Sheet of 10			
4407d	63¥	Stylized Goldfish (3)	Cyprinidae	A

2020 July 1 (Fish – Sea Life Series No. 4) Sheet/10

4409	Sheet of 10			
4409	Margin	TOP CTR/UL/UR: Blue-green Damselfish, *Chromis viridis*	Pomacentridae	A MS Z
		TOP CTR: Sapphire Devil, *Chrysiptera cyanea*	Pomacentridae	MS Z
		LR/LL: Clown Anemonefish (4), *Amphiprion ocellaris*	Pomacentridae	MS Z
		CTR: Yellowface Angelfish juvenile (?), *Pomacanthus xanthometopon*	Pomacanthidae	A MS Z
		LT CTR: Pajama Cardinalfish (3), *Sphaeramia nematoptera*	Apogonidae	A MS Z
		LR: Longnose Hawkfish, *Oxycirrhites typus*	Cirrhitidae	A MS Z
4409a	84¥	Pacific Double-Saddle Butterflyfish, *Chaetodon ulietensis*	Chaetodontidae	A
		Moorish Idol, *Zanclus cornutus*	Zanclidae	A
4409b	84¥	Blue-green Chromis (Blue-green Damselfish), *Chromis viridis*	Pomacentridae	A
4409c	84¥	Blue Devils (Sapphire Devil) (2), *Chrysiptera cyanea*	Pomacentridae	A
		Blue-green Chromis (Blue-green Damselfish), *Chromis viridis*	Pomacentridae	A
4409d	84¥	Blue Tang (Surgeonfish), *Acanthurus coeruleus*	Acanthuridae	A
4409e	84¥	Shepard's Angelfish (Mango Angelfish), *Centropyge shepardi*	Pomacentridae	A
		Yellow Tang, *Zebrasoma flavescens*	Acanthuridae	A
		Blue-green Chromis (Blue-green Damselfish), *Chromis viridis*	Pomacentridae	A
4409f	84¥	Moorish Idol (2), *Zanclus cornutus*	Zanclidae	A
4409g	84¥	Forceps Butterflyfish (Yellow Longnose Butterflyfish) (2), *Forcipiger longirostris*	Chaetodontidae	A
4409h	84¥	Fire Goby, *Nemateleotris magnifica* (2 horiz.)	Gobiidae	A
4409i	84¥	Saddle Butterflyfish, *Chaetodon ephippium*	Chaetodontidae	A
		Yellow Boxfish, *Ostracion cubicus*	Ostraciidae	A
4409j	84¥	Clownfish (Anemonefish) (2 horiz. in anenome), *Amphiprion ocellaris*	Pomacentridae	A

2020 July 8 (Ancient Tombs, UNESCO World Heritage Site, Osaka) Sheet/10

4410	Margin	LT/RT: U/I Stylized fish as part of border design		

KAZAKHSTAN **2020 May 12** (Fish) Set/6

918	5te	Caspian Anadromous Shad, *Alosa kessieri (volgensis)*, refers to range	Clupeidae	A
919	10te	Sea Trout, Salmo trutta (caspius); refers to Caspian Basin	Salmonidae	A
920	20te	Taimen, *Hucho taimen* (aka Siberian Giant Trout)	Salmonidae	A
921	60te	Fringebarbel Sturgeon, *Acipenser nudiventris*	Acipenseridae	A
922	A (130te)	*Stenodus leucichthys nelma (Stenodus nelma)*	Salmonidae	A
		No official common name (alternatively known as nelma, sheefish, inconnu, connie)		
923	200te	Sea Trout, *Salmo trutta araiensis (Salmo trutta)*	Salmonidae	A

KOREA (SOUTH) **2020 August 7** (Protected Marine Life) Blk/4

2574b	380w	Spotted Seahorse, *Hippocampus kuda*	Syngnathidae	A
2574c	380w	Longnose Seahorse, *Hippocampus trimaculatus*	Syngnathidae	A
No Sc#		MS/4 Blks of Sc# 257a-d w/ Spotted Seahorse in margin		

MACAO **2020 March 1** (Traditional Snack Foods) SS/1

1594	14p	Doce de pintura artistica (sugar painting) w/stylized fish on table		C S

MACAO (conntinued)

2020 August 10 (Luo Shen Fu, Ode to the Goddess of the Luo River) SS/1

1609 Margin LL: Stylized carp/koi (2) Cyprinidae A S Z

MEXICO **2020** (No Date) (Folk Art Type of 2005) Set/13

3171 13.50p Silver pear w/"Cuidad de Mexico" inscription with stylized fish as design element C

MONACO **2020 June 11** (Coral Reef) SS/3

3012a €1.16 Coral and fish (*Anthiase sp.*?) Serranidae B
LR: U/I fish in background

3012b €1.40 Coral, diver, and fish (*Anthiase sp*.?) Serranidae B
U/I fish in background

3012 Margin LL: Anthiase sp.? Serranidae SS Z

2020 October 23 (United Nations, 75th Anniv.) Horiz. Pair

3025a €1.40 Emblems of 17 Sustainable Development Goals w/ Stylized fish (LL)

MOROCCO **2020 June 5** (World Environment Day) Vert. Pair & SS/2

1287a 3.75d Brown Trout, *Salmo trutta*, Perf 13¼ syncopated Salmonidae A

1287c 3.75d Sc# 1287a, Perf 13¼ w/o syncopate A

1287e SS/2 Sc# 1287c-d A

Margin LL: Brown Trout, *Salmo trutta* Salmonidae A SS Z

NEVIS **2020 January 6** (Marine Life) SS/3 & SS/1

2002a SS/3 $2 Atlantic Wolffish, *Anarhichas lupus* Anarhichadidae A

2003 SS/1 $14 Ornate Butterflyfish (head/facing LT), *Chaetodon ornatissimus* Chaetodontidae A

Margin LL: Damselfish sp. Pomacentridae A SS Z

Background: Dark-banded Fusilier (school), *Pterocaesio tile* Caesionidae A SS Z

NORFOLK ISLAND **2020 July 14** (Fish) Set/2 & SS/2

1158 $1.10 Bumphead Sunfish, *Mola alexandrine* Molidae A

1159 $2.20 Oarfish (King of Herrings), *Regalecus glesne* Regalecidae A

1159a Margin SS/2 Oarfish (King of Herrings), *Regalecus glesne* Regalecidae A SS Z

PALAU **2018 December 25** (Sharks) Sheet/6 & SS/1

1410a 50c Bull Shark, *Carcharhinus leucas* (country name in purple) Carcharhinidae A

1410b 50c Same species (country name in orange) Carcharhinidae A

1410c $1 Tiger Shark, *Galeocerdo cuvier* (country name in purple Carcharhinidae A

1410d $1 Same species (country name in orange) Carcharhinidae A

1410e $2 Whale Shark, *Rhincodon typus* (country name in purple) Rhincodontidae A

1410f $2 Whale Shark, *Rhincodon typus* (country name in orange) Rhincodontidae A

1411 $4 Great White Shark, *Carcharodon carcharias* Lamnidae A SS

Margin U/I fish in background U S Z

2019 January 1 (Protanguila) Pair & MS/2 each, MS/5, 2xMS/4, SS/1

1420a $1.95 Palauan Primitive Cave Eel, Protanguilla palau (black background) Protanguillidae A

1420b $1.95 Sc# 1420a (dark blue background) Protanguillidae A

1421 Margin U/I fish in background

1421a $1.50 Brown-marbled Grouper, *Epinephelus fuscoguttatus* Serranidae A

1421b $1.50 Honeycomb Grouper, *Epinephelus merra* Serranidae A

PALAU (continued)

1421c	$1.50	Redmouth Grouper, *Aethaloperca rogaa*	Serranidae	A
1421d	$1.50	Squaretail Coralgrouper, *Plectropomus areolatus*	Serranidae	A
1421e	$1.50	Camouflage Grouper, *Epinephelus polyphekadion*	Serranidae	A
1421f	$1.50	Barramundi Grouper (Barramundi ?), *Lates calcarifer*	Latidae	A
1422a	$1.20	Papuan Toby, *Canthigaster papua*	Tetraodontidae	A
1422b	$1.20	Black-saddled Toby (Valentin's Sharpnose Puffer), *Canthigaster valentine*	Tetraodontidae	A
1422c	$1.20	Blue-spotted Puffer, *Arothron caeruleopunctatus* (Micronesia)	Tetraodontidae	A
1422d	$1.20	Map Puffer, *Arothron mappa*	Tetraodontidae	A
1422e	$1.20	Star Pufferfish (Stellate Puffer), *Arothron stellatus*	Tetraodontidae	A
1423a	$1.20	Tiger Shark, *Galeocerdo cuvier*	Carcharhinidae	A
1423b	$1.20	Blacktip Reef Shark, *Carcharhinus melanopterus*	Carcharhinidae	A
1423c	$1.20	Gray Reef Shark (Blacktail Reef Shark), *Carcharhinus amblyrhynchos*	Carcharhinidae	A
1423d	$1.20	Great Hammerhead Shark, *Sphyrna mokarran*	Sphyrnidae	A
1424	Margin	Great Barracuda, *Sphyraena barracuda* (large circular school)	Sphyraenidae	A
1424a	$1.20	Blacktip Reef Shark (2), *Carcharhinus melanopterus*	Carcharhinidae	A
		Remora (3), *Remora sp*.	Echeneidae	C
1424b	$1.20	Gray Reef Shark (Blacktail Reef Shark), *Carcharhinus amblyrhynchos*	Carcharhinidae	A
1424c	$1.20	Same species, facing LT on dark background	Carcharhinidae	A
1424d	$1.20	Same species, facing RT	Carcharhinidae	A
		Jack (?) sp. in background	Carangidae	B
1425	$4	Giant Manta, *Mobula birostris*	Myliobatidae	A

2019 December 27 (Maroon Clownfish) MS/3, SS/2

1442	Margin	Maroon Clownfish (2) (Spinecheek Anenomefish), *Amphiprion tricinctus*	Pomacentridae	A
1442a	$1	Same species, facing LT	Pomacentridae	A
1442b	$2	Same species, facing RT	Pomacentridae	A
1442c	$3	Same species, facing RT in anemone	Pomacentridae	A
1443	Margin	Same species, facing RT	Pomacentridae	A MS Z
1443a	$3	Same species, facing LT	Pomacentridae	A
1443b	$4	Same species, (2) facing RT and LT	Pomacentridae	A

2019 December 28 (Diplomatic Relations Between Palau and Japan, 25th Anniv.) MS/6

1446a	$1	Itabori ("storyboard") w/stylized Swordfish, *Xiphias gladius* facing RT	Xiphiidae	C
		U/I fish facing LT		UC
1446	Margin	UR: Stylized fish in house design		

PAPUA NEW GUINEA **2020 March 6** (Tuna Fishery Overprints of Sc# 1841-1842) Set/3

1994	1.60k	Atlantic Bluefin Tuna, *Thunnus thynnus* (ovpt on 2k Sc# 1842)	Scombridae	A
1995	5k	Yellowfin Tuna, *Thunnus albacares* (ovpt on 1.45k Sc# 1841)	Scombridae	A
1996	6.90k	Yellowfin Tuna, Thunnus albacares (ovpt on 1.45k Sc# 1841)	Scombridae	A

2020 March 7 (Chairmanship of the APEC Overprints of Sc# 1909-1910) Set/4

1997	1.60k	LL: Stylized fish (ovpt on 6.80k Sc# 1909)
1998	1.60k	LL: Stylized fish (ovpt on 6.80k Sc# 1910)

ROMANIA **2020 February 7** (Cats) Sheet/5 + label

6379 1.80L Persian cat with symbolic fish made from yarn B X

6379a Sheet/5+label

2020 July 2 (Spotted [Leopard-Type] Animals) Sheet/5 + label

6440 8.50L Leopard Shark, *Triakis semifasciata* Triakidae A

6440a Sheet/5+label

RUSSIA **2020 July 8** (Republic of Karelia- Centenary) Single

8179 100r UR: Stylized fish (Taimen (?), *Hucho taimen*) Salmonidae C S

SPAIN **2020 March 20** (Abbreviations of Spanish Provinces – Type of 2019) Single

4401 A Letters "CE" (Ceuta) with stylized fish hanging from "C" U C S

THAILAND **2019 September 11** (Worldwide Fund for Nature) Set/4 & SS/1

3077 3b Bryde's whale with U/I fish in background U

No Sc#SS/1 Sc# 3077 w/whale-like shaped margin

3078 3b Omura's whale with U/I fish in background U

3079 3b Whale Shark, *Rhincodon typus* Rhincodontidae A
U/I fish in background

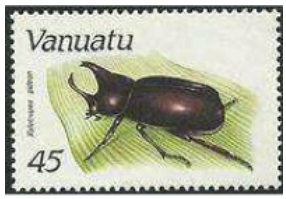
3080 3b Leatherback turtle with U/I fish in background U

No Sc#SS/1 Sc# 3080 w/turtle-like shaped margin

TUVALU **2019 May 1** (Day Octopi) Sheet/3 & SS/1

1445 Margin UL/UR: Damselfish sp. Pomacentridae Z

1447 $7 Octopus with Marginate Dascyllus(?), *Dascyllus marginatus* Pomacentridae B



ENTOMOLOGY

Editors

Don Wright BU 243
and Jose Reis BU 1889

New Listings

Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
AITUTAKI		**2020**		
a	50c	Great Purple Hairstreak, *Atlides halesus* Cramer	LYC, Theclinae	A
b	$1	Red Admiral, *Vanessa atalanta* L.	NYM, Nymphalinae	A
c	$5	Holly Blue, *Celastrina argiolus* L.	LYC, Polyommatinae	A
d	$7	Cryptic Wood White, *Leptidea juvernica* Williams, also in L margin	PIE, Dismorphiinae	AZ
a	$10	Silver-washed Fritillary, *Argynnis paphia* L.	NYM, Heliconiinae	A
b	$20	Painted Lady, *Vanessa cardui* L.	NYM, Nymphalinae	A
c	$30	Arctic Skipper, *Carterocephalus palaemon* Pallas	HES, Heteropterinae	A
d	$34.70	Large White, *Pieris brassicae* L.	PIE, Pierinae	A
ARMENIA		**2020 December 28** (Flora & Fauna of Armenia)		
	230d	Romanov's Hairstreak, *Tomares romanovi* Christoph	LYC, Theclinae	A
BOSNIA & HERZEGOVINA – Croat Admin. 2020 November 1				
a	2.90m	Dalmatian Ringlet, *Proterebia afra dalmata* Godart	NYM, Satyrinae	A
b	2.90m	Freyer's Purple Emperor, *Apatura metis* Freyer	NYM, Apaturinae	A
c	2.90m	Assmann's Fritillary, *Melitaea britomartis* Assmann	NYM, Nymphalinae	A
d	2.90m	Yellow-banded Skipper, *Pyrgus sidae* Esper	HES, Pyrgiinae	A
BULGARIA		**2020 December 1**1		
a	65st	Beech Longhorn Beetle, *Morimus asper funereus* Mulsant	CER, Lamiinae	A
b	1.10L	Sacred Beetle, *Scarabaeus sacer* L.	SCA, Scarabaeinae	A
c	1.70L	Leather Beetle, *Osmoderma eremita* Scopoli	SCA, Trichiinae	A
d	2.30L	Alpine Longhorn Beetle, *Rosalia alpina* L.	CER, Cerambycinae	A
		Margin: Great Capricorn Beetle, *Cerambyx cerdo* L.	CER, Cerambycinae	Z
CHRISTMAS ISLAND		**2020 October 30** (Christmas)		
599a	65c & $2.20	S/T of 598 & 599. No insects. Butterfly in margin	Lepidoptera	Z
600a	5x$2.20	S/A bklt pane of 5. No insects. Butterfly in margin	Lepidoptera	Z
601a	10x65c	Bklt pane of 10 + 10 labels. No insects. Btterfly in margin	Lepidoptera	Z
COOK IS. - RAROTONGA (Non-official)		**2020**		
a	50c	Adonis Blue, *Polyommatus bellargus* Rottemburg, also LR margin	LYC, Polyommatinae	AZ
b	$1	Black Hairstreak, *Satyrium pruni* L.	LYC, Theclinae	A
c	$5	European Skipper, *Thymelicus lineola* Ochsenheimer	HES, Hesperiinae	A
d	$7	Dingy Skipper, *Erynnis tages* L.	HES, Pyrginae	A
a	$10	Heath Fritillary, *Melitaea athalia* Rottemburg	NYM, Nymphalinae	A
b	$20	European Brown Hairstreak, *Thecla betulae* L.	LYC, Theclinae	A
c	$30	Orange Tip, *Anthocharis cardamines* L.	PIE, Pierinae	A
d	$34.70.	Large Skipper, *Ochlodes sylvanus* Esper	HES, Hesperiinae	A

CZECH REPUBLIC **2021 February 15**

1k	Orange Tip, *Anthocharis cardamines* L.	PIE, Pierinae	A

DENMARK **2020 September 16** (Courteous Writing Campaign) Set/5

1855	10k	Stylized Bee. "Spread a Little Joy".	Apidae	B
1857a		Booklet pane of 10, #1853-57		

FALKLAND ISLANDS **2020 November 20** (Children's Art)

1287	32p	Stylized Insect	Insect	A

FINLAND **2021 January 21** (Let's Take Care)

b	1st	Stylized Butterfly	Lepidoptera	A
f	1st	Stylized Bees	Apidae	B

2021 April 28 (Endangered Animals)

1st	Apollo, *Parnassius apollo* L.	PAP, Parnassiinae	A

GERMANY **2021 October 7**

€1.55	Butterfly	Lepidoptera	A

ISRAEL **2019 May 8** (Diplomatic Relations with Singapore)

2.50s & 7.40s	UL: Butterfly	Pieridae	B
	LR: Butterfly	Nymphalidae	B

2020 December 15 (Web of Life) (Identifications as per Israel Post)

4.10s Animals & Birds. No insect.

Listings here are L to R (Israel Post listed R to L)

Margin:	Pomegranate Playboy, *Deudorix livia* Klug	LYC, Theclinae	Z
	Bright Babul Blue, *Azanus ubaldus* Stoll	LYC, Polyommatinae	Z
	Iolaus glaucus Butler	LYC, Theclinae	Z
	Polyrhachis lacteipennis Bolton	FOR, Formicinae	Z
	Oxyrhachis furva Capener	Membracidae	Z

2020 Dcember 15 (Museum) (L&R Box Identifications as per Israel Post)

Listings here are L to R. (Israel Post listed R to L)

8 x 4.10s	*Agapanthia pustulifera* Pic, at UR	CER, Lamiinae	B
	Middle Eastern Jewel Beetle, *Steraspis squamosa* Klug, at M	BUP, Chrysochroinae	B
	Eastern Maybeetle, *Anoxia orientalis* Krynicky, At LL & LR	SCA, Melolonthinae	B
Selvage:	5 *Certallum ebulinum* L. (purple)	CER, Cerambycinae	Z
	5 Copper Beetles, *Protaetia cuprea* Fabr. (green)	SCA, Cetoniinae	Z
Margin, L Box, L to R:			
Row 1:	*Xylocopa pubescens* Spinola	API, Xylocopinae	Z
	European Grasshopper, *Oedipoda miniata* Pallas	ACR, Oedipodinae	Z
	Desert Mantid, *Eremiaphila sp.*	*ERE, Eremiaphilinae	Z
Row 2:	Clown-faced Bug, *Pyrrhocoris apterus* L.	Pyrrhocoridae	Z
	Scarlet Darter, *Crocothemis erythraea* Brulle	LIB, Sympetrinae	Z
	Tree Bug, *Graphosoma lineatum* L.	PEN, Podopinae	Z
	Arab Mantid, *Blepharopsis mendica* Fabr.	EMP, Blepharodinae	Z
Row 3:	U/I Grasshopper	Acrididae	Z
	Mediterranean Mantid, *Iris oratoria* L.	*ERE, Iridinae	Z
	Two-spotted Field Cricket, *Gryllus bimaculatus* De Geer	GRY, Gryllinae	Z

ISRAEL (continued)

Row 4:	Black-brown Diver, *Dytiscus marginalis* L.	DYT, Dytiscinae	Z
	Cicadetta musiva Germar	CICA, Cicadettinae	Z
Row 5:	*Isophya savigni* Brunner von Wattenwyl	TET, Phaneropterinae	Z
	Codophila varia Fabr.	PEN, Pentatominae	Z
	Truxalis sp.	ACR, Acridinae	Z
	Rhynocoris punctiventris Herrich-Schaeffer	RED, Harpactorinae	Z

Middle Box, L to R: (Butterflies) Identifications by editor DW.

Row 1:	Lesser Purple Emperor, *Apatura ilia* Denis & Schiffermuller	NYM, Apaturinae	Z
	U/I Butterfly	Lepidoptera	Z
	The Cleopatra, *Gonepteryx cleopatra* L.	PIE, Coliadinae	Z
Row 2:	Painted Lady, *Vanessa cardui* L.	NYM, Nymphalinae	Z
	2-Tailed Pasha, *Charaxes jasius* L.	NYM, Charaxinae	Z
	Large White, *Pieris brassicae* L.	PIE, Pierinae	Z
Row 3:	Red Admiral, *Vanessa atalanta* L.	NYM, Nymphalinae	Z
	Old World Swallowtail. *Papilio machaon* L.	PAP, Papilioninae	Z
	Colias sp., ♂	PIE, Coliadinae	Z
Row 4:	Large Tortoiseshell, *Nymphalis polychloros* L.	NYM, Nymphalinae	Z
	African Monarch, *Danaus chrysippus* L.	NYM, Danainae	Z
	Turkish Meadow Brown, *Maniola telmessia* Zeller	NYM, Satyrinae	Z

R Box: These are the names given in the order the Israel Post lists them, **R to L**, top to bottom. The order of the names does not correspond to the order of the beetles in the box. As an example, *Batocera rufomaculata* is 3rd on Row 2 on the Israel Post list, but it is 3rd in Row 3 on the s/s. Additionally, Israel Post only lists 14 beetle names while there are 15 beetles shown. Further work is needed to put the names in proper order.

Top Row:	*Certallum ebulinum* L.	CER, Cerambycinae	Z
	Mylabris sp.	MEL, Meloinae	Z
	Neoplagionotus bobelayei Brulle	CER, Cerambycinae	Z
	Red Palm Weevil, *Rhynchophorus ferrugineus* Olivier	DRY, Rhynchophorinae	Z
	Graphipterus sp.	CAR, Lebiinae	Z
Row 2:	*Capnodis carbonaria* Klug	BUP, Chrysochroinae	Z
	Agonum impressum Panzer	CAR, Carabinae	Z
	Mango Stem Borer, *Batocera rufomaculata* De Geer	CER, Lamiinae	Z
	Scarabaeus sp.	SCA, Scarabaeinae	Z
	Julodis sp.	BUP, Julodinae	Z
Row 3:	*Anoxia sp.*	SCA, Melolonthinae	Z
	Sycopant, *Calosoma sycophanta* L.	CAR, Carabinae	Z
	Agapanthia sp.	CER, Lamiinae	Z
	Beetle	Scarabaeidae	Z

This s/s sets a record for the most different insect species with 47 and a total of 56 on one issue, surpassing Tunisia #1263 with only 37 species but 131 total. Corrections and comments on partial identifications are welcome.

JAPAN **2020 June 10** (Flora & fauna of Iriomote Island) Set/10

4404 Sheet of 10

4404f 84¥ Large Tree Nymph, *Idea leuconoe* Erichson NYM, Danainae A

LUXEMBOURG **2020 December 8** (Wild Bees) Set/5

a E50g. Early Bumblebee, *Bombus pratorum* L. API, Apinae A
b E50g. Horned Mason Bee, *Osmia cornuta* Latreille MEG, Megachilinae A
c E50g. *Trachusa byssina* Panzer MEG, Megachilinae A
d E50g. Green-eyed Flower Bee, *Anthophora bimaculata* Panzer API, Apinae A
e E50g. *Eucera nigrescens* Perez API, Apinae A

NETHERLANDS **2021 January 4** (Experience Nature) Set/10

e (96c) European Beewolf, *Philanthus triangulum* Fabr. CRA, Philanthinae A

SINGAPORE **2019 May 8** (Diplomatic Relations with Israel) Set/2, SS/1

1967 $1.30 UL: Butterfly Pieridae B
1968 $1.30 LR: Butterfly Nymphalidae B
1968a Souvenir sheet of 2 #1967-68
Margin R: Butterfly silhouette Lepidoptera Z

SOUTH GEORGIA IS. & SOUTH SANDWICH IS. **2020 October 15** (Definitives) Set/12

619 1p *Eretmoptera murphyi* Schaeffer CHI, Orthocladiinae A

SWEDEN **2021 January 14** (Nature Scenes)

(12k) Stylized Fritillary Butterfly on flower NYM, Heliconiinae B

TONGA **2020**

a 75c Large Blue, *Maculinea arion* L. LYC, Polyommatinae A
b $1 Gatekeeper, *Pyronia tithonus* L. NYM, Satyrinae A
c $5 High Brown Fritillary, *Fabriciana adippe* Schiffermulle NYM, Heliconiinae A
d $11.80 Clouded Yellow, *Colias croceus* Geoffroy PIE, Coliadinae A
a $12.10 White Admiral, *Limenitis arthemis* Drury NYM, Limenitidinae A
b $20 Eros Blue, *Polyommatus eros* Ochsenheimer LYC, Polyommatinae A
c $50 Dark Green Fritillary, *Speyeria aglaja* L. NYM, Heliconiinae A
d $60 Mustard White, *Pieris napi* L. PIE, Pierinae A

TONGA - NIUAFO'OU **2020**

a 75c Glanville Fritillary, *Melitaea cinxia* L. NYM, Nymphalinae A
b $1 Grizzled Skipper, *Pyrgus malvae* L. HES, Pyrginae A
c $5 Brown Argus, *Aricia agestis* Denis & Schiffermuller LYC, Polyommatinae A
d $11.80 Brimstone, *Gonepteryx rhamni* L., also in margin PIE, Coliadinae AZ
a $12.10 Peacock, *Nymphalis io* L. NYM, Nymphalinae A
b $20 Chalk-hill Blue, *Polyommatus coridon* Poda, also in margin LYC, Polyommatinae AZ
c $50 Green Hairstreak, *Callophrys rubi* L. LYC, Theclinae A
d $60 Eurasian Comma, *Nymphalis c-album* L. NYM, Nymphalinae A

TURKMENISTAN **2020** (Beekeeping)

a	2.50m	Western Honeybee, *Apis mellifera* L.	API, Apinae	B
		Danaus sp.	NYM, Danainae	B
b-d	3.50m-5m	Western Honeybee, *Apis mellifera* L.	API, Apinae	A

UNITED NATIONS

New York **2020 December 5** (World Soil Day) Set/5

1260	$1.20	Stylized Butterfly	Lepidoptera	B
1262a		Vert strip of 5 #1258-62		

Vienna **2020 April 22** (Earth Day) Set/2

660	85c	"Lepidopterist". Art work by Paul Villinski	Lepidoptera	B

UNITED STATES **2021**

	(75c)	Colorado Hairstreak, *Hypaurotis crysalus* Edwards	LYC, Theclinae	A

URUGUAY **2020** (Pollinators)

a	27p	August's Carpenter Bee, *Xylocopa augusti* Lepeletier, ♂. Also on label	API, Xylocopinae	A
b	27p	*Augochlora amphitrite* Schrottky. Also on label in s/t	HAL, Halictinae	A

BEYOND THE CATALOG - Not listed in catalogs

CENTRAL AFRICAN REP. **2020 June 22** (Stamperija CA-200414a&b)

a	800fr	Mocker Swallowtail, *Papilio dardanus* Brown	PAP, Papilioninae	A
b	800fr	Caper White, *Belenois aurota* Fabr.	PIE, Pierinae	A
c	800fr	Broad-bordered Grass Yellow, *Eurema brigitta* Stoll	PIE, Coliadinae	A
d	800fr	African Monarch, *Danaus chrysippus* L.	NYM, Danainae	A
e	3000fr	Narrow Blue-banded Swallowtail, *Papilio nireus* L.	PAP, Papilioninae	A
		Margin LL: Crossley's Forest Queen, *Euxanthe crossleyi* Ward	NYM, Charaxinae	Z
		UR: *Euxanthe trajanus* Ward	NYM, Charaxinae	Z

2020 June 22 (Stamperija CA-200415a&b)

a	800fr	Eastern Dotted Border, *Mylothris agathina* Cramer	PIE, Pierinae	A
b	800fr	Red Admiral, *Vanessa atalanta* L.	NYM, Nymphalinae	A
c	800fr	Holly Blue, *Celastrina argiolus* L.	LYC, Polyommatinae	A
d	800fr	Glanville Fritillary, *Melitaea cinxia* L.	NYM, Nymphalinae	A
e	3000fr	Eastern Tiger Swallowtail, *Papilio glaucus* L., ♀	PAP, Papilioninae	A
		Margin UR: 2 Amethyst Blues, *Zizeeria knysna* Trimen	LYC, Polyommatinae	Z
		Bottom: Pipevine Swallowtail, *Battus philenor* L.	PAP, Papilioninae	Z

2020 June 22 (Stamperija CA-200416a02 & b14)

440fr		Scarce Swallowtail, *Iphiclides podalirius* L., San Marino #1281 s-o-s	PAP, Papilioninae	A
1000fr		Mourning Cloak, *Nymphalis antiopa* L., San Marino #1283 s-o-s	NYM, Nymphalinae	A

2020 July 24 (Mushrooms) (Stamperija CA-200504a&b)

b	50fr	Apollo, *Parnassius apollo* L.	PAP, Parnassiinae	B
c	850fr	Purple-shot Copper, *Lycaena alciphron* Rottemburg	LYC, Lycaeninae	B
	3300fr	Asian Swallowtail, *Papilio xuthus* L. Also in margin	PAP, Papilioninae	B
		Margin Top, LL, LR: Red Wood Ant, *Formica polyctena* Forster	FOR, Formicinae	B

CHAD **2020 May 30** (Stamperija TCH-200307a&b)

a	800fr	Falcate Orange Tip, *Anthocharis midea* Hubner	PIE, Pierinae	A
b	800fr	Spectacle Swordtail, *Graphium mandarinus* Oberthur	PAP, Papilioninae	A
c	800fr	Common Nawab, P*olyura athamas* Drury	NYM, Charaxinae	A
d	800fr	Cruiser, *Vindula erota* Fabr.	NYM, Heliconiinae	A
e	3300fr	Royal Assyrian, *Terinos terpander* Hewitson	NYM, Charaxinae	A
		Margin: Orange Oakleaf, *Kallima inachus* Boisduval	NYM, Nymphalinae	Z

2020 August 20 (Stamperija TCH-200405a&b)

a	800fr	Western Honeybee, *Apis mellifera* L.	API, Apinae	A
b	800fr	Eastern Honeybee, *Apis cerana* Enderlein	API, Apinae	A
c	800fr	Common Carder Bee, *Bombus pascuorum* Scopoli	API, Apinae	A
d	800fr	Eastern Carpenter Bee, *Xylocopa virginica* L.	API, Xylocopinae	A
e	3300fr	Western Honeybee, *Apis mellifera* L. Also in margin	API, Apinae	AZ

2020 August 20 (Stamperija TCH-200406a&b)

c&d,	800fr.	Stylized Malaria Mosquito, *Anopheles sp*.	CUL, Anophelinae	B
	3300fr	No insect		
		Margin LL: Stylized Malaria Mosquito, *Anopheles sp.*	CUL, Anophelinae	Z

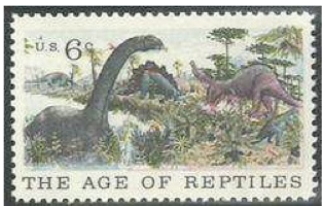
LIBERIA **2020 June 28** (Stamperija LIB-200309a&b)

a	$200	Mourning Cloak, *Nymphalis antiopa* L.	NYM, Nymphalinae	A
b	$200	Peacock, *Nymphalis io* L.	NYM, Nymphalinae	A
c	$200	Sleepy Orange, *Eurema nicippe* Cramer	PIE, Coliadinae	A
d	$200	Cardinal, *Argynnis pandora* Schiffermuller	NYM, Heliconiinae	A
e	$200	Apollo, *Parnassius apollo* L.	PAP, Parnassiinae	A
f	$200	Common Pierrot, *Castalius rosimon* Fabr.	LYC, Polyommatinae	A
	$1200	Malachite, *Siproeta stelenes* L.	NYM, Nymphalinae	A
		Margin: Scarlet Peacock, *Anartia amathea* L.	NYM, Nymphalinae	Z

TOGO **2020 October 8** (Stamperija TG-200333a&b) (Useful Parasites)

a-a	800fr	Monarch, *Danaus plexippus* L.	NYM, Danainae	B
		Lespesia archippivora Riley	Tachinidae	B
a-b	800fr	*Aphidius ervi* Haliday	BRA, Aphidiinae	B
		Green Peach Aphid, *Myzus persicae* Sulzer	APH, Aphidinae	B
	3300fr	L: *Anagyrus lopezi* De Santis	*ENC, Tetracneminae	B
		R: Citrus Mealybug, *Planococcus citri* Risso	Pseudococcidae	B
		Margin LL & UR: Monarch, *Danaus plexippus* L.	NYM, Danainae	B
		UR: *Lespesia archippivora* Riley	Tachinidae	B

*New Family on stamps
ENC = Encyrtidae ERE = Eremiaphilidae



PALEONTOLOGY

Editor

Michael Kogan, BU 1863

New Listings

Scott# Denom Common Name/Scientific Name Family/Subfamily Code

All official stamps which are directly related to Paleontology and Paleoanthropoly that issued in the last 3 months are printed by famous Stramperija agency, who prints hundreds of new stamps for two dozen of their customers every month and dominate in production of topical stamps in last two decades.

By the way, since short time ago, the agency has new website: https://www.stampera.eu

*One of their recent stamp set is indeed different from others and can be considered by serious collector*s

TAJIKISTAN 2020 December 20 (Paleontology of Tajikistan)
TJS 6.30 †*Kansajsuchus extensus* and TJS 7.00 Settlement of Konsoy
TJS 5.80 Dinosaur footprint and TJS 9.00 Shirkent National Park
TJS 5.80 Amonite *Cleoniceras* and TJS 17.60 Pamir Montains
TJS 12.70 †*Mammuthus meridionalis* and 15.00 Kayrakkum reservoir

**Available as imperforated stamps too, as common for all stamps of Stamperija*

These stamps issued in four Mini-Sheets. Every Mini-Sheet contains four pairs of stamps.
The stamp on the left shows fossil, footprint or reconstruction of prehistoric animal when the stamp on the right shows landscape of a place where its fossils were found.
Left side of every Mini-Sheet has a short explanation on Tajik and English languages.

Reconstruction of the prehistoric animal in his living environment shown on the bottom side of the Mini-Sheet. To visualize these prehistoric animals, the stamp designer, made no sketch or computer drawing, but just manipulated some stock images of the agency, therefore these images don't show unique features of the reconstructed animals and might be not accurate from the scientific point of view.

Mammuthus meridionalis on the stamp has big ears, as the modern African elephant, when the Mammoth on the Mini-Sheet's margin has small ears, as the modern Asian elephant.

More details are here: http://www.paleophilatelie.eu/description/stamps/tajikistan_2020.html

In 2020 Tajikistan starts to produce their stamps by Stamperija agency.
Distinguished from many other clients of Stamperija, stamps of Tajikistan shows some domestic flora, fauna, and cultural objects related to the country and so far produced in the reasonable quantity.

According to local collector, most stamps produced by Stamperija on behalf of Tajikistan are available in the central post office of Dushanbe, but the Paleontology set is still on the way.

This is also means that the FDC that produced together wit the stamps is actually the Souvenir Cover rather than First Day of issue Cover and very likely cannot be used for postage.

---- *Other stamps of Stamperija, this time extremely many stamps are produced* ----

CENTRAL AFRICAN REPUBLIC **2020 November 30**
(150y American Museum of Natural History) MS 4 & SS 1 [*1]
SS 3600fr Mounted skeleton of †*Barosaurus* dinosaur †Diplodocidae A SS

2020 November 30 (Dinosaurs) MS 4 & SS 1 [*1]

a	850fr	†*Parasaurolophus walkeri*	†Hadrosauridae	A MS
b	850fr	†*Majungasaurus crenatissimus*	†Abelisaurida	A MS
c	850fr	†*Abelisaurus comahuensis*	†Abelisauridae	A MS
d	850fr	†*Spinosaurus aegyptiacus*	†Spinosauridae	A MS
e	SS 3300fr	†*Ankylosaurus magniventris*	†Ankylosauridae	A MS
	Margin:	†*Spinosaurus aegyptiacus*	†Spinosauridae	A SS Z

2020 July 24 (80y discovery of cave paintings in Lascaux, France) MS 4 & SS 1 [*1]
MS 900fr x4
SS 3600fr

2020 July 24 (Flying dinosaurs) MS 4 & SS 1 [*1] [*2]

a	850fr	†*Archaeopteryx lithographica*	†Archaeopterygidae	A MS
b	850fr	†*Pteranodon longiceps*	†Pteranodontidae	A MS

CENTRAL SAFRICAN REPUBLIC (continued)

c	850fr	†*Dimorphodon macronyx*	†Dimorphodontidae	A MS
d	850fr	†*Ornithocephalus banthensis*	†Rhamphorhynchidae	A MS
e	SS 3300fr	†*Pterodactylus longicaudus*	Suborder: †Pterodactyloidea	A MS
	Margin:	†*Ornithocephalus banthensis*	†Rhamphorhynchidae	A SS
		†*Pteranodon longiceps*	†Pteranodontidae	A SS Z
		†*Dimorphodon macronyx*	†Dimorphodontidae	A SS Z

2020 July 24 (Meteorites and Dinosaurs) MS 4 & SS 1 [*1]

a	850fr	Iron meteorite		
b	850fr	The Canyon Diablo meteorite and †Pterosauromorpha		B MS
c	850fr	L chondrite and †*Protoceratops andrewsi*	†Protoceratopsidae	B MS
d	850fr	Tektite and †*Ouranosaurus nigeriensis*	Suborder: †Ornithopoda	B MS
e	SS 3300fr	The Chelyabinsk meteor		
	Margin:	Iron meteorite; †*Proceratosaurus bradleyi*	†Proceratosauridae	B SS Z

2020 June 22 (Dinosaurs) MS 4 & SS 1 [*1]

a	800fr	†*Cryolophosaurus ellioti*	Clade: Theropoda	A MS
b	800fr	†*Lexovisaurus durobrivensis*	†Stegosauridae	A MS
c	800fr	†*Pentaceratops sternbergii*	†Ceratopsidae	A MS
d	800fr	†*Camarasaurus supremu*s	†Camarasaurida	A MS
e	SS 3000fr	†*Styracosaurus albertensis*	†Ceratopsidae	A SS
	Margin:	†*Zhongyuansaurus luoyangensis*	†Ankylosauridae	A SS Z
		†*Ophiacodon mirus*	†Ophiacodontidae	A SS Z

2020 June 22 (Flying dinosaurs) MS 4 & SS 1 [*1] [*2]

a	800fr	†*Dimorphodon macronyx*	†Dimorphodontidae	A MS
b	800fr	†*Peteinosaurus zambelli* Order:	†Pterosauria	A MS
c	800fr	†*Rhamphorhynchus muensteri*	†Rhamphorhynchidae	A MS
d	800fr	†*Anhanguera santanae*	†Anhangueridae	A MS
		†*Dorygnathus banthensis*	†Rhamphorhynchidae	A MS
	Margin:	†*Pterodactylus antiquus*	Suborder: †Pterodactyloidea	A MS
e	SS 3000fr	†*Archaeopteryx lithographica*	†Archaeopterygidae	A MS

2020 June 22 (Extinct Mammals) MS 4 & SS 1 [*1]

a	900fr	†*Cypretherium coarctatum*	†Entelodontidae	A MS
b	900fr	†*Megacerops coloradensis*	†Brontotheriidae	A MS
c	900fr	†P*latybelodon grangeri*	†Amebelodontidae	A MS
d	900fr	†*Sivatherium giganteum*	Giraffidae	A MS
e	SS 3600fr	†*Macrauchenia patachonica*	†Macraucheniidae	A SS
	Margin:	†*Sivatherium giganteum*	Giraffidae	B SS Z

DJIBOUTI **2020 July 27** (Flying dinosaurs) MS 4 & SS 1 [*1] [*2]

a	250fr	†*Anhanguera blittersdorffi*	†Anhangueridae	A MS
b	250fr	†*Peteinosaurus zambelli*	Order: †Pterosauria	A MS
c	250fr	†*Quetzalcoatlus northropi*	†Azhdarchidae	A MS
d	250fr	†*Pteranodon longiceps*	†Pteranodontidae	A MS
e	SS 1000fr	†*Ornithocephalus banthensis*	†Rhamphorhynchidae	A SS

DJIBOUTI (continued)

	Margin: †*Quetzalcoatlus northropi*		†Azhdarchidae	B SS Z
		†*Pteranodon longiceps*	†Pteranodontidae	A SS Z
		†*Peteinosaurus zambelli*	Order: †Pterosauria	B SS Z

2020 July 27 (Fossils) MS FB 250 x4

a	250fr	†*Carcharocles megalodon* tooth	†Otodontidae	A MS
b	250fr	*Triceratops horridus*	†Ceratopsidae	A MS
c	250fr	†Ammonite	Subclass: †Ammonoidea	A MS
d	250fr	†Trilobite fossil	Phylum: Arthropoda	A MS
e	SS 1000fr	†*Seymouria* fossil	†Seymouriidae	A SS
	Margin: †Trilobite fossil		Phylum: Arthropoda	A SS Z

2020 June 12 (80y discovery of cave paintings in Lascaux, France) MS 2 x2 & SS 1 [*1]
MS 200fr x2
MS 400fr x2
SS 1000fr

GUINEA **2020 October 26** (Fossils) (MS 4 & SS 1) [*1]

a	15000fr	†*Sclerocephalus auseris*	†Sclerocephalidae	A MS
b	15000fr	Fossils of Trilobites	Phylum: Arthropoda	A MS
c	15000fr	†*Sinraptor dongi*	†Metriacanthosauridae	A MS
d	15000fr	†*Plesiosaurus dolichodeirus*	†Plesiosauridae	A MS
e	SS 60000fr	†*Ichthyosaurus communis*	†Ichthyosauridae	A SS
	Margin: *Galeocerdo mayumbensis* tooth		Carcharhinidae	B SS Z
		Ammonites	Subclass: †Ammonoidea	B SS Z

2020 October 26 (PREHISTORIC WATER ANIMALS) MS 4 & SS 1 [*1]

a	15000fr	†*Tylosaurus proriger*	†Mosasauridae	A MS
b	15000fr	†*Mawsonia gigas*	†Mawsoniidae	A MS
c	15000fr	†*Shonisaurus popularis*	†Shonisauridae	A MS
d	15000fr	†*Kronosaurus queenslandicus*	†Pliosauridae	A MS
e	SS 60000fr	†*Ichthyosaurus communis*	†Ichthyosauridae	A SS
	Margin: †*Kronosaurus queenslandicus*		†Pliosauridae	A SS Z

GUINEA-BISSAU **2020 September 29** (Prehistoric birds) MS 4 & SS 1) [*1]

a	740fr	†*Argentavis magnificens*	†Teratornithidae	A MS
b	740fr	†*Iberomesornis romerali*	†Iberomesornithidae	A MS
c	740fr	†*Dromornis stirtoni*	†Dromornithidae	A MS
d	740fr	†*Confuciusornis sanctus*	†Confuciusornithidae	A MS
e	SS 3000fr	†*Hieraaetus moorei*	Accipitridae	A SS
	Margin: †*Vorombe titan*		†Aepyornithidae	A SS Z

LIBERIA **2020 November 30** (Dinosaurs) MS 4 & SS 1 [*1]

a	$300	†*Ankylosaurus magniventris*	†Ankylosauridae	A MS
b	$300	†*Spinosaurus aegyptiacus*	† Spinosauridae	A MS
c	$300	†*Triceratops prorsus*	†Ceratopsidae	A MS
d	$300	†*Heterodontosaurus tucki*	†Heterodontosauridae	A MS

LIBERIA (continued)

e	SS	$1200	†*Tarbosaurus bataar*	†Tyrannosauridae	A SS
			†*Stegosaurus stenops*	†Stegosaurida	A SS
	Margin:		†*Coelophysis bauri*	†Coelophysidae	A SS Z
			†*Heterodontosaurus tucki*	†Heterodontosauridae	A SS Z

2020 November 30 (80y discovery of cave paintings in Lascaux) (MS 4 & SS 1) [*1]

a	$300	Marcel Ravidat 1922–1995			
b	$300	Georges Agniel 1924–2012			
c	$300	Simon Coencas 1927–2020			
d	$300	Jacques Marsal 1926–1989			
e	SS	$1200	Marcel Ravidat 1922–1995		
	Margin:		Lascaux International Center of Parietal Art, Homo sapiens		

2020 November 30 (Fossils) MS 4 & SS 1 x2 [*1]

a	$300	†*Asteroceras obtusum*		Subclass: †Ammonoidea	A MS
b	$300	†*Carcharocles megalodon* tooth		†Otodontidae	A MS
c	$300	*Seirocrinus subangularis*		Pentacrinitidae	A MS
d	$300	*Athleta spinosa*		Volutidae	A SS
e	SS	$1200	*Latimeria chalumnae*	Latimeriidae	A MS
	Margin:		Trilobite (?)	Class: †Trilobita	A MS Z
f		SS	$1200 *Eusthenopteron foordi*	†Tristichopteridae	A SS Z
	Margin:		Ammonite	Subclass: †Ammonoidea	A SS Z

2020 October 26 (Flying dinosaurs) MS 4 & SS 1 [*1] [*2]

a	$300	†*Anhanguera blittersdorffi*		†Anhangueridae	A MS
b	$300	†*Anurognathus ammoni*		†Anurognathidae	A MS
c	$300	†*Pteranodon longiceps*		†Pteranodontidae	A MS
d	$300	†*Microraptor zhaoianus*		†Dromaeosauridae	A MS
e	SS	$1200	†*Pteranodon longiceps*	†Pteranodontidae	A SS
	Margin:		†*Quetzalcoatlus northropi*	†Azhdarchidae	A SS Z

2020 October 26 (PREHISTORIC HUMANS) MS 4 & SS 1 [*1]

a	$300	Neanderthals hunting a bison			
b	$300	A Neanderthal's and a modern human's skull			
c	$300	Tools used by prehistoric humans			
d	$300	*Homo neanderthalensis*		Hominidae	A MS
e	SS	$1200	*Homo neanderthalensis*	Hominidae	A SS
	Margin:		Obsidian knife with bone handle		

MALDIVES 2020 July 21 (Fossils) (MS 4 & SS 1) [*1]

a	22r	†*Collignoniceras woolgari*		†Collignoniceratidae	A MS
b	22r	†*Plesiosaurus macrocephalus*		Order: †Plesiosauria	A MS
c	22r	†*Eryon propinquus*		†Eryonidae	A MS
d	22r	†*Bos primigenius*		Bovidae	A MS
	Margin:		†*Rhomaleosaurus cramptoni*	†Rhomaleosauridae	A MS *Z*
e	SS	70r	†*Diprotodon optatum*	†Diprotodontidae	A SS
	Margin:		†*Megatherium cuvieri*	†Megatheriidae	A SS Z

SÃO TOMÉ and PRINCIPE **2020 November 3**0 (Dinosaurs)

a	31d	†*Triceratops horridus*	†Ceratopsidae	A MS
b	31d	†*Edmontosaurus regalis*	†Hadrosauridae	A M*S*
c	31d	†*Spinosaurus aegyptiacus*	†Spinosauridae	A MS
d	31d	†*Gigantichthys numidus*	Pristidae	A MS
e	SS 124d	†*Parasaurolophus walkeri*	†Hadrosauridae	A SS
	Margin:	†*Ctenochasma roemeri*	†Ctenochasmatidae	A SS Z
		†*Tyrannosaurus rex*	†Tyrannosauridae	A SS Z

2020 November 30 (Extinct species) MS 4 & SS 1 [*1]

a	31d	†*Smilodon fatalis*	Felidae	A MS
b	31d	†*Mammuthus primigenius*	Elephantidae	A MS
c	31d	†*Bison priscus*	Bovidae	A MS
d	31d	†*Smilodon fatalis*	Felidae	A MS
e	SS 124d	†*Arsinoitherium zitteli*	†Arsinoitheriidae	A SS
	Margin:	†*Megantereon cultridens*	Felidae	A SS Z

SIERRA LEONE **2020 August 31** (Dinosaurs) MS 4 & SS 1 [*1]

a	14500le	†*Spinosaurus aegyptiacus*	†Spinosauridae	A MS
		†*Triceratops horridus*	†Ceratopsidae	B MS
b	14500le	†*Pterodactylus longicaudus*	†Rhamphorhynchidae	A MS
		†*Tyrannosaurus rex*	†Tyrannosauridae	A MS
c	14500le	†*Pteranodon longiceps*	†Pteranodontidae	A MS
		†*Ankylosaurus magniventris*	†Ankylosauridae	A MS
d	14500le	†*Stegosaurus stenops*	†Stegosauridae	A MS
e	SS 58000le	†*Brachiosaurus altithorax*	†Brachiosauridae	A SS
	Margin:	†*Centrosaurus apertus*	†Ceratopsidae	A SS Z
		†*Tyrannosaurus rex*	†Tyrannosauridae	A SS Z

2020 August 31 Prehistoric water animals MS 4 & SS 1 [*1]

a	14500le	†*Nothosaurus mirabilis*	†Nothosauridae	A MS
b	14500le	†*Hydrotherosaurus alexandrae*	†Elasmosauridae	A MS
c	14500le	†*Ichthyosaurus communis*	†Ichthyosauridae	A MS
d	14500le	†*Pliosaurus ferox*	*†Pliosauridae*	*A MS*
e	SS 58000le	†*Tylosaurus proriger*	†Mosasauridae	A SS
	Margin:	†*Dinichthys terrelli*	†Dinichthyidae	A SS Z

2020 August 31 Flying dinosaurs MS 4 & SS 1 [*1] [*2]

a	14500le	†*Archaeopteryx lithographica*	†Archaeopterygidae	A MS
b	14500le	†E*udimorphodon ranzii*	†Eudimorphodontidae	A MS
c	14500le	†*Zhejiangopterus linhaiensis*	†Azhdarchidae	A MS
d	14500le	†*Zhenyuanopterus longirostris*	*†Boreopteridae*	*A MS*
e	SS 58000le	†*Rhamphorhynchus muensteri*	†Rhamphorhynchidae	A SS
	Margin:	†*Pteranodon longiceps*	†Pteranodontidae	A SS Z

2020 August 31 Fossils MS 4 & SS 1 [*1]

a	14500le	†*Parasaurolophus walker*i	†Hadrosauridae	A MS
b	14500le	*†Ammonoidea*	Subclass: †Ammonoidea	A MS
c	14500le	*†Brachiopoda*	Phylum: Brachiopoda	A MS

SIERRA LEONE (continued)

d	14500le	†*Ichthyosaurus communis*	†Ichthyosauridae	A MS
e	SS 58000le	†*Ammonoidea*	Subclass: †Ammonoidea	A SS
	Margin: †*Tyrannosaurus rex*		†Tyrannosauridae	A SS Z

2020 July 15 80y discovery of cave paintings in Lascaux) MS 4 & SS 1) [*1]
MS Le 14500 x4
SS Le 58000

TOGO **2020 October 08** Prehistoric humans MS 4 & SS 1 [*1]

a	800fr	†*Homo neanderthalensis*	Hominidae	A MS
b	800fr	†Lucy	Hominidae	A MS
c	800fr	†*Australopithecus afarensis*	Hominidae	A MS
d	800fr	†*Homo erectus*	Hominidae	A MS
e	SS 3300fr	†*Homo neanderthalensis*	Hominidae	A SS
	Margin: †*Australopithecus afarensis*		Hominidae	A SS Z

2020 October 08 Flying dinosaurs MS 4 & SS 1 [*1] [*2]

a	800fr	†*Dsungaripterus weii*	†Dsungaripteridae	A MS
b	800fr	†*Gnathosaurus subulatus*	†Ctenochasmatidae	A MS
c	800fr	†*Pterodactylus antiquus*	Suborder: †Pterodactyloidea	A MS
d	800fr	†*Pterodaustro guinazui*	†Ctenochasmatidae	A MS
e	SS 3300fr	†*Tupandactylus imperator*	†Tapejaridae	A SS
	Margin: †*Dimorphodon macronyx*		†Dimorphodontidae	A SS Z

Personalized stamps

BRAZIL "Valley of the Dinosaurs, Paraíba" - the date of the issue is unknown

This personalized stamp appeared on internet just recently. Perhaps it was issued last year.

The image is just a photo of some sculptures of the park, perhaps *Compsognathus*.

Some details about the park are on Wikipedia:
https://en.wikipedia.org/wiki/Valley_of_the_Dinosaurs,_Para%C3%ADba

In 2019 Brazilian Post issued two personalized stamps with reconstructions of Vespersaurus *paranaensis* dinosaur and *Caiuajara debruskii* pterosaur. Whose fossils found in the park, as report in our magazine 69(1). Some more details are here: http://www.paleophilatelie.eu/description/stamps/personalized/brazil_2019.html

Other official stamps to consider:

GREAT BRITAIN 2021 January 14 "National Parks"

The set of 10 1st class stamps, printed in two horizontal se-tenant strips, with images selected in collaboration with the National Parks, commemorate the 70th anniversary of the opening of the first of the UK's 15 National Parks.

At least one park from this list can be considered as fossil found place.

The South Downs (the second from the left on the bottom row) are formed from a thick band of chalk which was deposited during the Cretaceous Period between 75 and 90 million years ago this part of the country was under a shallow tropical sea. Chalk muds were laid down at the bottom of this sea and were very thick and widespread.

The rock is composed of the microscopic skeletons of plankton which lived in the sea, hence its color. The chalk has many fossils, and bands of flint occur throughout the formation.

More details are here: http://www.paleophilatelie.eu/description/stamps/others/uk_2021.html

Postal stationeries

CHINA **2020** (exact date is unknown) "*Shantungosaurus* dinosaur of Zhu Cheng - World's Largest Duck-billed Dinosaur Fossil".

New postal stationery (foreground) of China dedicated to the biggest hadrosaurid dinosaur in the world – *Shantungosaurus*.

It has the height of 9.1m and 16.6m in length and lived approximately 70 million years ago.

In 2002 the skeleton of the dinosaur appeared on imprinted postal stationery of China for the first time (backround). This time the stamp has a face value of 80 fen. The same skeleton shown on the foreground of cachet.

Imprinted stamp on the new postal stationery has the face value of 1.20 yuan. The cachet represents the reconstruction of the dinosaur.
According the text on the reverse side of the new cover, the face value of the imprinted stamp was changed in 2009.

More details about both postal stationeries (2002 and 2020) are here:
http://www.paleophilatelie.eu/country/china.html#ps2

中国邮政集团有限公司山东省函件广告局发布 20−370811−12−0006−000 巨型鸭嘴恐龙化石 (2009)

Postmarks

Tajikistan 2020 December 20 “Paleontology of Tajikistan” [FDC]
Dinosaur footprint, perhaps from Shirkent National Park

Future Issues

Armenia - set of two stamps "Flora and fauna of the ancient world (V)". One stamp of *Titanoboa* (an extinct genus of very large snake, it could grow up to 13 meter long and reach a weight of 1,135 kg) and another one with famous *Velociraptor* dinosaur

Notes:

[*1] - Commercial issue: stamps are issued with only one purpose - to sell for collectors. Stamps of countries who issued too many or too expensive stamps. Not recommended for serious collectors.

[*2] - Flying dinosaurs is wrong term, as dinosaurs per definition are terrestrial animals. The flying reptiles called Pterosaurs.

If you know about any recent or feature Paleontology related stamp not listed above, please send a short message to our Associate Editor Mr. Michael Kogan admin@paleophilatelie.eu or per post to the magazine, address is on the inside cover of the magazine.

Images and description of all stamps, postal stationeries and postmarks mentioned above can be seen on the following website: http://www.paleophilatelie.eu/year/current.html (2021) or http://www.paleophilatelie.eu/year/2020.html (2020)

www.Paleophilatelie.eu

the most comprehensive resource about Paleontology and Paleoanthropology in Philately, the place where Paleontology and Paleoanthropology meets Philately

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. h*ttp://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. *https://americantopical.org*

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-filatelista.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*

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/*

E**ntomological Data Information System.** Internet links to many worldwide websites dealing with biology and ecology, especially Lepidoptera. *http://www.globis.insects-online.de*

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
Fl	Flowers (with or without other plant parts)
Fr	Fruit (including seeds, nuts, grains, etc.)
FrV	Grain head with sheaf or stalk
L	Lichen
M	Mushroom or fungus
T	Trees (without flowers or fruit)
V	Various (vines, vegetables, roots, leaves, etc.)
Wr	Wreath
Wr*	Head wreath (or chaplet)

A	Subject is the primary design element
B	Subject is only part of the main design
C	Subject is a minor representation
G	Subject is a generalized depiction
R	Related subject (e.g., scientist, equipment)
S	Subject is a stylized or symbolic depiction
U	Subject is unidentified or unidentifiable
X	Subject is a lookalike (e.g., mushroom cloud)
Z	Subject is in the Margin or selvage
*	Subject is natural color (no longer in use)

Acronyms and Abbreviations:

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

Entomology Family Abbreviations:

ACR Acrididae
ANO Anobiidae
ARC Arctiidae
BRA Brahmaeidae
CAL Calopterygidae
CAS Castniidae
CHRY Chrysopidae
COC Coccinellidae
CORD Cordulegastridae
CRA Crabronidae
CUR Curculionidae
DYT Dytiscidae
ENC Encyrtidae
GEO Geometridae
GRA Gracillariidae
HAL Halictidae
ICH Ichneumonidae
LIB Libellulidae
LYC Lycaenidae
MAN Mantidae
MEM Membracidae
MYR Myrmeleontidae
NOT Notodontidae
PAP Papilionidae
PHA Phasmatidae
PLU Plutellidae
PTE Pterophoridae
RAP Rhaphidophoridae
ROM Romaleidae
SCA Scarabaeidae
SES Sesiidae
SIR Siricidae
STA Staphylinidae
TEN Tenebrionidae
TIP Tipulidae
URA Uraniidae
ZYG Zygaenidae

AES Aeshnidae
ANT Anthicidae
BEL Belostomatidae
BRAC Braconidae
CAN Cantharidae
CER Cerambycidae
CIC Cicadellidae
COE Coenagrionidae
CORE Coreidae
CRAM Crambidae
DER Dermestidae
ELA Elateridae
ERE Eremiaphilidae
GEOT Geotrupidae
GRY Gryllidae
HES Hesperiidae
LAM Lampyridae
LIM Limacodidae
LYG Lygaeidae
MEG Megachilidae
MIR Miridae
NOC Noctuidae
NYM Nymphalidae
PAS Passalidae
PHY Phylliidae
POM Pompilidae
PYR Pyralidae
RED Reduviidae
SAR Sarcophagidae
SCO Scoliidae
SIL Silphidae
SPH Sphingidae
SYR Syrphidae
TEP Tephritidae
TOR Tortricidae
VES Vespidae

AND Andrenidae
API Apidae
BLA Blattidae
BUP Buprestidae
CAR Carabidae
CHR Chrysomelidae
CICA Cicadidae
COR Corydalidae
COS Cosmopterigidae
CUL Culicidae
DRO Drosophilidae
FOR Formicidae
FUL Fulgoridae
GOM Gomphidae
GRYA Gryllacrididae
HYM Hymenopodidae
LAS Lasiocampidae
LUC Lucanidae
LYM Lymantriidae
MEL Meloidae
MUS Muscidae
NOL Nolidae
OEC Oecophoridae
PEN Pentatomidae
PIE Pieridae
PSY Psychodidae
PYRG Pyrgomorphidae
RIO Riodinidae
SAT Saturniidae
SCU Scutelleridae
SIM Simuliidae
SPHE Sphecidae
TAB Tabanidae
TET Tettigoniidae
TRI Trichogrammatidae
YPO Yponomeutidae

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