BIOPHILATELY

OFFICIAL JOURNAL OF THE BIOLOGY UNIT OF ATA
DECEMBER 2020 VOLUME 69 NUMBER 4

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Now you see it, Now you don't: Transparency

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 at left. 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 publisher 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 February 2021.

FROM THE INTERIM EDITOR'S DESK

Chris Dahle, BU 1269

This issue of *Biophilately* is smaller than usual. We are missing several submissions from our New Issues editors for a variety of reasons: fewer new issues to report; too many other competing projects; and a lack of an editor, in the case Marine Invertebrates. We are looking for volunteers to fill a slot as overall Editor, as well as the Marine Invertebrates editor. Jack Congrove had a bee in his bonnet about introducing a column on Microbiology, so if anyone would like to start that, please step forward.

There is a great deal of philately going on-line as a result of the coronavirus pandemic. Shows are still being canceled, the latest casualty being the Southeastern Stamp Expo in Atlanta in January 2021. But the American Association of Philatelic Exhibitors recently had a virtual Champion of Champions competition of Single-Frame exhibits that was supposed to be held in conjunction with Chicagopex. You can see the exhibits which qualified here: http://www.aape.org/single_frame_c_of_c_qualifiers.asp.

During the month of October, for Stamp Collecting Month, the American Topical Association (ATA) sponsored a number of talks that can still be seen on YouTube. They can be accessed on the new ATA website here:
https://americantopical.org/Videos-&-Presentations.

And the American Philatelic Society is temporarily making copies of the *American Philatelist* available to non-members as well, they announced on November 16. For a while now, the American Philatelic Library's journal, *Philatelic Literature Review* has been available on line. You can watch the Library's Postal History Symposium videos. This year the topic was "Postal Innovation of the Classic Era." There were five days of presentations, each of which featured three speakers.

It is again time to renew your membership in the Biology Unit. It is uncertain when or if we will continue to publish a list of members given the restrictions on privacy, especially from the European Union. In the event that we do include a directory, we need to have your permission to publish your mailing address and/or email address. That is why we ask all members, including Life Members, to submit a Renewal Form. You will find a form on the back cover of this issue or as a separate insert.

chris-dahle@biophilately.org

DUES RATES	**ADVERTISING RATES**
US membership $25	Full page insertion $20
Canada membership $30	Half page insertion $10
Worldwide membership $45	Quarter page insertion $6
On-line membership $15	

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

PRESIDENT'S MESSAGE

We are all still under Covid lockdown ten months later. This continues as a time of isolation and uncertainty. I personally feel frustration and impatience, as I want to get out and work on my genealogy or browse through stamp stock binders. The Libraries and Historical Societies are still closed down and stamp shows are cancelling left and right. That goodness for the internet.

As I write this, Thanksgiving is next week. No family get togethers this year, as I have to protect my 91 year old mother. As I reflect, I realize that there are still things to be thankful for. There are four new hedgehog stamps released this year! No one close to me has died from Covid. Although some family members have had the virus, they have recovered completely. As much as I wanted to visit towns and explore libraries and graveyards, I do have the internet to help me find information. As people are stuck at home and bored, they are taking DNA tests to explore their ancestry. This surge has helped increase my chances of finding cousins! I have found that many stores are offering great web offers to increase their sales. I am spending more time with the dogs and cat, not sure if this is good or an annoyance. I suppose the greatest positive to come this year is ZOOM. I have it pretty well figured out, except to get my video and audio at the same time. Guess it better to hear me than see me. I certainly have been able to attend more organization meeting and seminars as a result of the shutdowns. Before Zoom I could not attend the out of town meetings. Now I can easily attend and feel more a part of the organization. I think a lot of people feel the same way. I certainly loved the ATA talks from August and October; it was wonderful to keep connected. So glad they will continue next year.

Stay safe this Holiday Season. Remember that the best way to show love to family and friends is to keep them safe and virus free!

SECRETARY'S CORNER

There were two new members this quarter. There are still 24 members in arrears.

NEW MEMBERS

#1907 Mannan Mashhur Zarif of Dhaka, Bangladesh collects donkeys.
#1908 Heather Burrowes, Troy, NY collects dogs, plants, prehistoric animals, conservation

Members in arrears

Boorman	Gray	Mauney	Stout
Bratlie	Hanks	Nystuen	Van Laere
Cooper	Harrison	Odum	Wallach
Das	Lobmeyer	Setterberg	Weber

The last payment of dues from those in the list was for 2019. This will be your last issue of *Biophilately* unless I receive payment. Please also pay your dues for 2021. And please inform me if you wish to drop your membership in the Biology Unit.

NEWS

2021 ATA Distinguished Topical Philatelist Nominations Are Now Being Accepted

It is the hope of the DTP Selection Team that individuals, study units and chapters will actively consider nominating an individual for this very prestigious recognition. The Distinguished Topical Philatelist for 2021 will be the highest award ATA presents in Rosemont, IL during the Great American Stamp Show, a joint show of the American Philatelic Society, American Topical Association and the American First Day Cover Society – Aug. 12-15, 2021.

This recognition is bestowed upon a person who has made significant contributions to topical philately and to ATA in particular. The letter of nomination should detail the person's contribution to philately – in particular – topical philately.

We are especially interested in nominations that highlight the contribution of ATA members to the life and activities of the local, that is chapters and units, levels. It is at that level that a very large portion of the activities of topical and thematic collecting within ATA takes place.

The Distinguished Topical Philatelist award was established in 1952 by the late ATA founder Jerome (Jerry) Husak. Since then, 124 people have received the honor. Recipients have included residents of the United States, Canada, Great Britain and Italy. Find a complete listing of past winners at ATA's website. The url is:https://americantopical.org/ATA-Awards

Please consider a worthy person in your ATA Chapter or Study Unit for this honor. It is not only recognition for the awardee but also for the chapter or unit.

For the 2021 award send nominations or questions to DTP Chairperson, Myron Molnau, 1616 E 32nd Ct, Spokane WA 99203-3918. or at hobbies@turbonet.com. The deadline for nominations is Dec. 31, 2020.

FASCINATING BUTTERFLIES WITH TRANSPARENT WINGS

Vladimir Kachan, Belarus

Butterflies are one of a lot of varied as well as attractive insects worldwide and are viewed as brightly coloured, day-active and harmless insects reflecting tranquility and harmony. The beauty of each butterfly lies in its wings, in their various colors.

Figure 1 – Stationery card of Costa Rica 1999 with glasswing butterfly *Greta oto*

In the tropical forests of South America there are the butterflies that have lost their scaly covering, and their wings are almost completely transparent. When such a butterfly is on the crown of a tree, it is quite unnoticeable because the design of a leaf on which it sits appears through its glassy wings (Figure 1).

Clear-winged butterflies, also called glasswing butterflies, live mostly in Central America and South America. They look like other butterflies in every way except one: Instead of sporting brilliant color displays, they have wings you can see through. Their wings are shaped like those of other butterfly species, but clear-winged butterflies lack the tiny scales necessary to create color. The overlapping scales provide multicolor displays on the wings of many butterflies, but the clear-winged variety has only a few concentrated around the outer edges, often in brown or orange. Veins appear like webs throughout the wings, but these don't add much color -- they typically look brown.

The butterfly with scientific name *Greta oto* (Figure 2) is known by the common name glasswing butterfly for its unique transparent wings that allow it to camouflage without extensive coloration. The butterfly is mainly found in Central and northern regions of South America with sightings as far north as Texas and as far south as Chile. While its wings appear delicate, the butterfly is able to carry up to 40 times its own weight. In addition to its unique wing physiology, the butterfly is known for behaviors such as long migrations and the ability to fly up to eight miles per hour for short periods of time. The transparent wings help the butterfly blend in with the environment to avoid predators while in flight and while at rest. In order for its wings to be transparent, the tissues of the wings must not absorb light. The irregular structure of the butterfly wing causes little to no reflection of light, causing the glass-like effect on the wings of the butterfly. This irregular structure has even been a source of biomimicry to create anti-reflective coatings for technology. Engineers are copying the butterfly's wing to create surfaces that sieve light with exquisite precision.

Figure 2 – Stamp of Romania 2011, Scott #5249, with tab and butterfly *Greta oto*

The clear tissue that makes up the wings (Figure 3) does not contain the colour-producing scales present in most butterfly wings. As a result, the tissue does not absorb or scatter much light, instead letting most of it pass through. Not much light is reflected, either, due to microscopic structures on the surface called 'nanopillars'. The nanopillars have a random distribution of sizes and positions, which means that there is a gradual transition between the refractive index of the wing and that of the surrounding air. This

Figure 3 – Souvenir sheet of Nicaragua 1991, Scott #1870, with glasswing butterfly *Ithomia derasa*

ensures very low reflection over a wide range of wavelengths. The end result is that the wings appear optically transparent.

The look of these beautiful glasswing butterflies fluttering their transparent wings has brought inspiration to engineers studying biomimetics, especially in optics. In the case of glasswing butterflies, scientists focus on the irregular nanostructure of their wings which gives them this ability to let light pass through (Figure 4). For example, German engineers from the Karlsruhe Institute of Technology have been studying glasswing butterflies to solve issues involved in screen glare. The team seeks to develop a perfect anti-glare display for laptops, smartphones, and other devices. This, however, is not the only biomimetic study that glasswing butterflies have inspired. The most recent development in glasswing butterfly biomimicry comes from the California Institute of Technology. Engineers took the antireflective property of the wings of longtail glasswing butterflies with scientific name *Chorinea faunus* (Figure 5) as a model to develop an ultrathin eye implant to monitor intra-eye pressure. With Caltech's biophotonic eye implant, which comes with a handheld reader device, glaucoma patients can monitor the pressure inside their eyes constantly at home, and take medications if there's a spike. Also known as the Glasswing Swallowtail, this butterfly is found in the more North-Eastern countries of South America. The wings of this butterfly are mostly transparent with bright red tails - beautiful and delicate long tailed glasswing swallowtail.

Figure 4 - Stamp of Grenada-Grenadines 2019 with glasswing butterfly *Pteronymia cotyttot*

Figure 5 – Stamp of Grenada-Grenadines 1991, Scott #1285, with butterfly *Chorinea faunus*

A similar butterfly *Chorinea licursis* species can be found in the forests of Brazil (Figure 6). *Chorinea licursis* has a wingspan reaching about 30–35 millimetres. These butterflies are quite variable with respect to the size of the transparent region and of spots on the hindwings. They have transparent wings outlined with black and long tails on the hindwings. Forewings and hindwings are crossed by black veins and by two black transverse bands. At the base of the hindwing tails there are bright red marks.

Figure 6 – Stamp of Brazil 2016, Scott #3347o, with butterfly *Chorinea licursis*

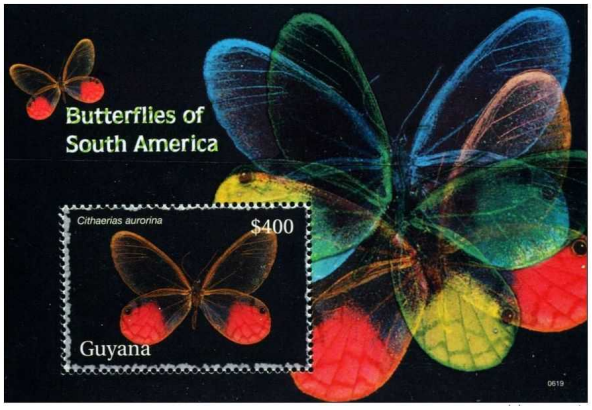


Figure 7 – Souvenir sheet of Guyana 2007, Scott #3965, with butterfly *Cithaerias aurorina*

In fact, there are many dazzling species with transparent wings. For example, this the Pink Glasswing Butterfly, sometimes known as the Blushing Phantom. This transparent butterfly with scientific name *Cithaerias aurorina* (Figure 7) simply cannot be photographed. The

effect in real life is of glowing pink matter floating through the dark jungle, one of the great sites of the rainforest to behold.

In the Brazilian jungles butterflies *Cithaerias aurora* species emerge in a variety of ornamental colors. Normally their transparent wings are beautifully colored with eye-like spots ringed with several circles and a reddish flush on the hindwings. Although they are colorful, these wings are weak. Rather than flying with their thin wings, they flit and dance among the herbage, often hiding from their enemies in tall grass and trees (Figure 8).

Figure 8 – Stamp of Brazil 1979, Scott #1620, with butterfly *Cithaerias aurora*

One special species of glasswing butterfly *Cithaerias merolina* out there has a special "blush" look to it (Figure 9). The pink glasswing butterfly – which can be found in the Amazon region – has clear wings at the top, which turn pinkish towards the bottom, making for a butterfly with matching blushing wings. A stunning clearwing butterfly from the undergrowth of a rainforest. Clear wings transition into pink at the tip of the hindwing. A small eyespot is found in the pink shading.

Figure 9 – Stamp of Grenada 2005, Scott #3491c, with butterfly *Cithaerias merolina*

One of the greatest treasures of tropical forest in South America is *Cithaerias esmeralda*, a butterfly whose wings are transparent except for a bright violet patch on the hind wing (Figure 10). This dusk-flying butterfly with wingspan about 5 centimeters uses its wings to remain hidden, tricking observers with false eyes, or hiding in flight on see-through wings.

Figure 10 – Stamp of Grenada-Grenadines 2000, Scott #2195d, with butterfly *Cithaerias esmeralda*

Glasswing butterflies are widespread throughout much of Central America and South America inhabiting the lowland rain forests. One such stunning butterfly species is *Haetera piera*. The butterfly is known as the amber phantom, with light yellow in the bottom wing (Figure 11). These butterflies can be recognized by their largely transparent wings with delicate colors and two bold ocellion the outer margin of the hindwings. Butterflies glide through the understory along the forest floor, and it is during flight that the hind wing colors are most conspicuous. This butterfly thrives in the tropical conditions of the rainforests.

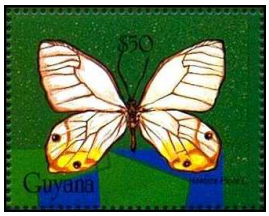


Figure 11 – Stamp of Guyana 1994, Scott #2827d, with butterfly *Haetera piera*

Butterflies attract by virtue of their remarkable appearance, but, among other things, they also play an important role in natural ecosystems, serving as pollinators of many species of flowering plants. The delicacy of their finely patterned wings, some of which are painted in vivid colours, their energetic behaviour and conspicuous presence in our gardens and nature reserves all contribute to our fascination with them (Figure 12).

Figure 12 – Stationery card of Cuba 2012 with glasswing butterfly *Greta cubana*

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

How are fossils made? A look at fossilization portrayed on stamps.

Peter Voice
Western Michigan University and the Michigan Geological Survey

A fossil is the remains or traces of a once living organism preserved in the geologic record. My historical geology professor added to the definit ion that the organism had to have lived 10,000 or more years ago (I actually teach this as well – it is a bit arbitrary, but provides a working cut-off between paleontological and archaeological research). The remains can include mineralized hard parts of the skeleton (shells, teeth, bones) or soft flesh (tissues, hair, feathers). Traces are an intriguing (and at times very frustrating) part of the definition – as these are geologic structures formed by organisms that exhibit that a.) the animal was present in the environment and b.) it was actively doing some behavior. Trace fossils include footprints, nests, coprolites (fossilized feces) and many other structures. They can be frustrating because we cannot be certain that we know what kind of organism produced the structure (and some simple burrows for example are known to be made by multiple species in modern environments). The study of trace fossils is called ichnology (Figure 1).

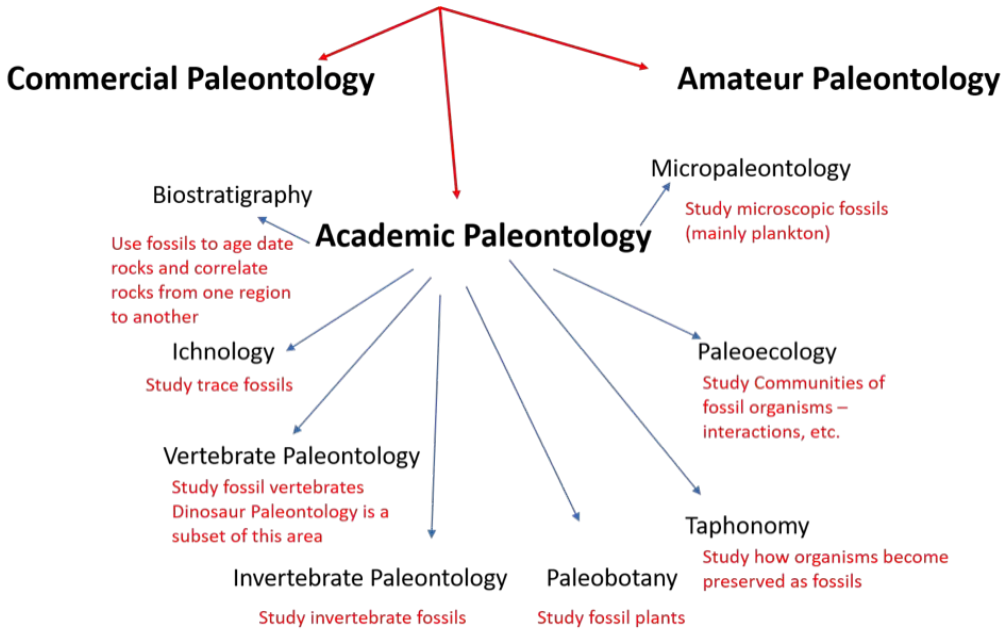


Figure 1: Types of Paleontology with brief descriptions of the various sub-disciplines in Paleontology.

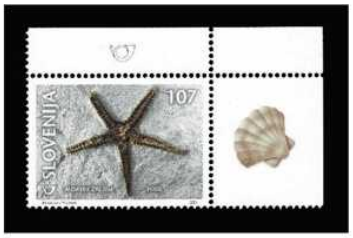
How does an organism become a fossil? Paleontologists have spent the better part of two centuries working to figure this out. There is even a sub-branch of paleontology (Figure 1) called taphonomy that focuses in part on fossilization. Taphonomic research includes understanding how an animal dies (illness, predation), how the body becomes buried, how the fossil becomes preserved and later is brought to the surface where paleontologists can find it. Some illnesses as well as parasitism can leave traces of symptoms preserved in the bones of the affected animals. Examples include parasitic sores from trichomonas in Tyrannosaurus Rex jaws and silicosis in the joints of North American Rhinocerids. Some taphonomists study the traces of predation – abrasion on bone or shell from teeth of predators. Some naticid snails for example use their tongue-like radula to bore into the shells of other snails or clams, leaving a distinctive circular boring in the shell. Some fossils even exhibit partial healing with new shell or bone growth partially filling in the predation scar.

Taphonomists define several mechanisms that might preserve an organism as a fossil. These mechanisms include unaltered remains, recrystallization, replacement, and carbonization and

compression. In addition, one mechanism preserves the shape of the organism but not the actual remains – casts and molds. Each mechanism will briefly be described below with examples of stamps that illustrate the mechanism (Figure 2). In all cases, burial is key to fossilization – as quickly burying an

Theropod dinosaur footprints,
Lesotho, 1984, SC 445-447

Helminthoides burrows
France, 2018 SC 5365



Recrystallized Starfish
Slovenia, 2001, SC 454

Carbon films of ferns
British Antarctic Territory
2008, SC 401-404

External Casts of Ammonoid
and Trilobite head, Local Issues,
Spain, 2019

Recrystallized Gryphea (Oyster)
Luxembourg, 1984 SC 715

Internal Mold, Bivalve
Slovenia, 2014, Local Issue

Apatite Replacement and
Recrystallization,
Gigantosaurus
Serbia, 2009 SC 489

Opalized fossils - Replacement with Opal
Australia, 2020, SC - Not Available Yet

Carbon films of insects
Brazil, 2016, SC 3349a and b

Fossil Insect in Amber
Lebanon, 2003, SC 570

Figure 2: Selected images illustrating different fossilization mechanisms on stamps. Scans courtesy of Michael Kogan's paleophilatelie.eu.

organism will prevent scavenging (and the breakdown of the body into scattered pieces by messy eaters), but also removes the organism from the effects of oxygen and microbially- and fungally-mediated decomposition.

Unaltered remains are rare and are limited to relatively recent rocks. Soft-bodied preservation as unaltered remains are known from highly specialized environments. Probably the best examples come from Pleistocene mammals preserved frozen in the permafrost in northern North America and Siberia. In

these cases, cold, dry air mummifies the body followed by burial and can preserve fine details like the stomach contents. A variety of frozen animals including bison, horses, mammoths, caribou and wolves have been found. Other cases of soft-bodied preservation include desiccation and mummification in arid settings or preservation in tar pits such as the La Brea Tar Pits of California. Fossils in amber preserve the shape of the animal, though over time decay will alter the chemistry of the preserved remains. The oldest unaltered skeletal materials include Mother of Pearl shells in ammonoids (a coil-shelled animal related to squids and the nautilus) that date back to the Early Jurassic.

Recrystallization is a common process that preserves many mineralized skeletal elements – especially shells. Most marine animals today secrete shells made of up calcium carbonate in the form of aragonite. Aragonite is one of two common polymorphs of calcium carbonate – the other being the mineral calcite. Calcite and aragonite are chemically the same, but the way the calcium and carbonate ions are arranged is different in each mineral. Aragonite is less stable at Earth surface conditions. A clam shell is made up of tiny crystals of aragonite embedded in a framework of collagen and chitin. After burial, as groundwater flows through the porous structure, chemical reactions can slowly reorganize the aragonite into calcite, while also growing the crystals larger to fill in the void left as the collagen and chitin decay. After fossilization, a recrystallized fossil exhibits a chemistry that is very similar to the original skeletal composition.

Replacement generates some of the prettiest fossils that paleontologists have described. As the name suggests, the original hard (or soft parts in the case of wood) parts are replaced by new minerals. There are two flavors of replacement: petrifaction and permineralization. During petrifaction, the organism is quickly dissolved and replaced generating a fossil that shows the coarse features of the original plant or animal. Permineralization is a slower process – operating at the atomic scale by slowly replacing one atom at a time. Because Permineralization is a slow process, permineralized fossils generally exhibit exceptional detail that can include the structure of individual cells in the body! Replacement usually generates a fossil with a completely new chemistry – common replacement minerals include pyrite (FeS_2), silica (SiO_2) and Opal (hydrated SiO_2), and apatite (more common in porous bone where this Calcium Phosphate mineral fills the pores left behind after decay of collagen).

Carbonization and compression is another mechanism that preserves soft-bodied organisms or the soft-bodied tissues of organisms with mineralized skeletons. After burial, as more and more sediments are laid down on top of the animal, heat and pressure volatilize organic compounds and slowly convert the body to pure carbon (graphite). The fossil tends to be compressed into a 2-d sheet. Organisms like plants and jellyfish are commonly preserved as carbon films. In some cases, carbonization will preserve carbon films around the skeleton of an animal – showing the shape of the animal with flesh on the bone. Carbon films often form in fine-grained rocks like some limestones and shales – and some taphonomists think that clay minerals may be partly responsible for the preservation of carbon films.

The last mechanism does not preserve the actual animal but instead both an impression of the organism (a mold) and a replica of the organism (a cast). After death, the animal falls into mud – if you were to come across the body later on, you could pull the animal from the ground and see the impression left behind. Footprints are a similar idea – as you step in mud, the mud conforms to your feet. Then as you take your next step, pulling your foot out of the mud and leaving behind an impression of the sole of your foot. If the animal is completely buried, and groundwater has dissolved the shell and flesh, a void space can be left in the rock. This void space has the shape of the animal that decayed away. Later on sediment can filter down into the void or cement can be precipitated by groundwater to fill the void. In

both cases, the material forms a 3-dimensional replica of the animal. Molds and casts are complicated by the observation that some animals can form multiple molds (think of snails – where sediment can conform to the outer surface of the shells as well as fill in the hollow after the snail's body decayed away. This has led to more nomenclature – with internal molds and external molds. In a clam, the external mold shows the surface ornamentation – ribs, spines etc., while the internal mold exhibits the muscle scars and pallial line (where the flesh of the mantle attaches to the shell).

Unfortunately, fossilization is a rare process. Paleontologists recognize that most organisms have very little chance of making it into the fossil record. Fossilization is more likely for organisms with mineralized skeletons that lived in marine environments where burial was rapid. In terrestrial environments, weathering and erosion may break down the organism before it gets buried (and scavengers and decomposers can also attack the remains). Paleontologists also recognize the fossilization is more likely if the species was very abundant (so future paleontologists exploring our era might find a lot of cow and human remains – due to both abundance and for humans – burial customs).

Acknowledgements
Michael Kogan kindly reviewed several drafts of this article, providing very useful feedback to improve it.

References

Parasitism in Tyrannosaurus Rex
(https://www.nationalgeographic.com/science/phenomena/2009/10/06/the-plague-of-tyrants-a-common-bird-parasite-that-infected-tyrannosaurus/)

Silicosis in Rhinocerids the aftermath of one of the Yellowstone hotspot Eruptions
(https://www.youtube.com/watch?v=2ofNufZVcMU)

Permafrost Fossils
http://www.bbc.com/earth/story/20141105-animal-mummies-from-the-ice-age
https://allthatsinteresting.com/ice-age-wolf-pup-caribou-canada

Fossilization
https://www.livescience.com/37781-how-do-fossils-form-rocks.htmlhttp://scienceviews.com/dinosaurs/fossilformation.html

and any basic Historical Geology textbook (I use Stanley and Luczaj's Earth System History).

BOTANY

Editor

Christopher E. Dahle BU1269

New Listings

Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
AUSTRALIA		**2020 April 29** (Voyage of HMS Endeavour type of 2020) Sheet/10 SA, die cut 11¾		
5147d	55c	Banksia flower, *Banksia sp*.	Proteaceae	Fl B MS
		2020 July 21 (Australian Alps) Set/3, SS/3 Perf 14x14¾		
5167	$1.10	Snow gum trees, *Eucalyptus pauciflora*	Myrtaceae	T A
5169a		Souvenir sheet of 3 #5167-69		
		Set/3 Coil SA die cut 11¼		
5170	$1.10	Snow gum trees, *Eucalyptus pauciflora*	Myrtaceae	T A
5172a		Strip of 3 #5170-72		
BELGIUM		**2020 January 27** (Pentagonal items in nature) Sheet/5+ labels		
2909c	1 (€1.55)	Balloon flower bud, *Platycodon grandiflorus*	Campanulaceae	Fl A
2909e	1 (€1.55)	Sliced okra pod, *Abelmoschus esculentus*	Malvaceae	Fr A
CHINA (Taiwan)		**2020 April 24** (Taijiang National Park) Set/4		
4533	$15	Beach morning glories and Sand Bar, I*pomoea pes-caprae*	Convolvulaceae	Fl B
4534	$28	Mangrove flower and Sicao Mangrove Green Tunnel		Fl B U
COLOMBIA		**2019 October 9** (Traditional dishes) Sheet/4		
1516a	2000p	Sugar cane, *Saccharum officinale*	Poaceae	V B Z
1516c	2000p	Plantains, *Musa × paradisiaca*	Musaceae	Fr B Z
		2019 December 27 (Department type of 2003: Putumayo) Minisheet /12		
1533j	2000p	Inca nut, *Plukenetia volubilis*	Euphorbiaceae	Fr A MS
DJIBOUTI		**2019 December 12** (Chinese Paintings) Sheet/16		
1898-1913		Unidentified plants		Fl T A U MS
FINLAND		**2019 September 11** Single		
1596	(€1.60)	Calla lily, *Zantedeschia aethiopica*	Araceae	Fl A
Åland		**2019 September 20** (Harvest Festival) Vert. strip/3		
424c	(€1.60)	Woman with apple, *Malus domestica*	Rosaceae	Fr B
424d		Booklet pane of 9, 3 each 424a-c		
		2019 October 24 (Year of the Rat) Sheet/2		
427	60c	Blackberries, *Rubus fruticosus*	Rosaceae	Fr B MS
FRANCE		**2020 March 6** (Cabinet of Curiosities) Set/12		
5799	(97c)	Drawing of tulips, *Tulipa x hybrida*	Liliaceae	Fl A
5810a		Booklet pane of 12 #5799-5810		
		2020 April 30 (Cosmos flowers) Set/12		
5830-41		(97c) Four images in various colors, *Cosmos bipinnatus*	Asteraceae	Fl A
5841a		Booklet pane of 12		

GERMANY **2020 August 6** (Flower type of 2005) Single

3178	200c	Purpur-knautie, widow flower, *Knautia macedonica*	Caprifoliaceae	Fl A

GREAT BRITAIN

England **2020 March 17** (Regional types of 2018) Set/2

41	£1.42	Oak, *Quercus robur*	Fagaceae	T A
42	£1.63	Tudor rose, *Rosa sp.*	Rosaceae	Fl A

Scotland **2020 March 17** (Regional types of 2018) Set/2

55	£1.42	Thistle, *Onopordum acanthium*	Asteraceae	Fl A

Wales & Monmouthshire **2020 March 17** (Regional types of 2018) Set/2

55	£1.42	Daffodils, *Narcissus pseudonarcissus*	Amaryllidaceae	Fl A

GUYANA **2019 December 15** (Plants) Sheet/3, SS/1

4615a	$300	Zebra plant, *Haworthia fasciata*	Xanthorrhoeaceae	V A
4615b	$400	Cactus	Cactaceae	V A U
4615c	$500	Aloe, *Aloe vera*	Xanthorrhoeaceae	V A
4616	$800	Cacti	Cactaceae	V A U SS

HONG KONG **2019 June 11** (Greetings) Set/6

2011	($2)	Roses in hearts, *Rosa x hybrida*	Rosaceae	Fl A

ISRAEL **2020 June 9** (Summer Flowers) Set/3 with tabs

2261	7.40s	False yellowhead, *Dittrichia viscosa*	Asteraceae	Fl A
2262	8.30s	Hairy willowherb, *Epilobium hirsutum*	Onagraceae	Fl A
2263	11.80s	Jerusalem caper, *Capparis zoharyi*	Capparaceae	Fl A

JAPAN **2020 January 15** (Food) Bklt/20, bklt/10

4366		Pane of 20		
4366a	63¥	Dried fish and garlic, *Allium sativum*	Amaryllidaceae	V B
4366f	63¥	Ramen noodles and strawberries, *Fragaria ananassa*	Rosaceae	Fr B
4366h	63¥	Vegetables, radishes, *Raphanus sativus*	Brassicaceae	V B
4366i	63¥	Pepper and lemons, *Citrus limon*	Rutaceae	Fr B

2020 January 23 (Greetings) Set/6

4366		Sheet of 10, 5 each		
4369a	63¥	Pink roses, *Rosa x hybrida*	Rosaceae	Fl A
4369b	63¥	Pink roses, *Rosa x hybrida*	Rosaceae	Fl A
4370		Sheet of 10, 5 each		
4370a	84¥	White roses, *Rosa x hybrida*	Rosaceae	Fl A
4370b	84¥	White roses, *Rosa x hybrida*	Rosaceae	Fl A
4371		Sheet of 10, 5 each		
4371a	94¥	Orchids	Orchidaceae	Fl A
4371b	94¥	Orchids	Orchidaceae	Fl A

2020 February 7 (Miyakojima Tourist Attractions) Set/5

4375		Sheet of 5		
4375c	84¥	Hibiscus, *Hibiscus rosa-sinensis*	Malvaceae	Fl A

2020 February 20 (Flowers) Set/20

4376		Sheet of 20		
4376a	63¥	Dandelions, *Taraxacum campylodes*	Asteraceae	Fl A

JAPAN (continued)

4376b	63¥	Nemophila, *Nemophila menziesii*	Boraginaceae	Fl A
4376c	63¥	Strawberries, *Fragaria ananassa*	Rosaceae	Fl A
4376d	63¥	Primroses, *Primula verna*	Primulaceae	Fl A
4376e	63¥	Daisies, *Leucanthemum vulgare*	Asteraceae	Fl A
4376f	63¥	Winter daphne, *Daphne odora*	Thymelaeaceae	Fl A
4376g	63¥	Peonies, *Paeonia officinalis*	Paeoniaceae	Fl A
4376h	63¥	Poppies, *Papaver orientale*	Papaveraceae	Fl A
4376i	63¥	Pansies, *Viola x wittrockiana*	Violaceae	Fl A
4376j	63¥	Clover, *Trifolium pratense*	Fabaceae	Fl A
4377		Sheet of 10		
4377a	84¥	Cherry blossoms, P*runus serrulata*	Rosaceae	Fl A
4377b	84¥	Cherry blossoms, *Prunus serrulata*	Rosaceae	Fl A
4377c	84¥	Peach blossoms, *Prunus persica*	Rosaceae	Fl A
4377d	84¥	Cherry blossoms, *Prunus serrulata*	Rosaceae	Fl A
4377e	84¥	Mimosa, *Acacia dealbata*	Fabaceae	Fl A
4377f	84¥	Rose of Sharon, *Hibiscus syriacus*	Malvaceae	Fl A
4377g	84¥	Spirea, S*piraea japonica*	Rosaceae	Fl A
4377h	84¥	Camellia, *Camellia japonica*	Theaceae	Fl A
4377i	84¥	Tulips, *Tulipa x hybrida*	Liliaceae	Fl A
4377j	84¥	Rape blossoms, *Brassica napus*	Brassicaceae	Fl A

2020 March 3 Set/10

4378		Sheet of 10, 2 each		
4378a	63¥	Cherry blossoms, *Prunus serrulata*	Rosaceae	Fl A
4378b	63¥	Asian Fawnlily, *Erythronium japonicum*	Liliaceae	Fl A
4378c	63¥	Safflower, *Carthamus tinctorius*	Asteraceae	Fl A
4378d	63¥	Hydrangea, *Hydrangea macrophylla*	Hydrangeaceae	Fl A
4378e	63¥	Japanese iris, I*ris japonica*	Iridaceae	Fl A
4349		Sheet of 10, 2 each		
4349a	84¥	Citrus blossoms, *Citrus sp.*	Rutaceae	Fl A
4379b	84¥	Tulips, *Tulipa x hybrida*	Liliaceae	Fl A
4379c	84¥	Cherry blossoms, *Prunus serrulata*	Rosaceae	Fl A
4379d	84¥	Hydrangea, *Hydrangea macrophylla*	Hydrangeaceae	Fl A
4379e	84¥	Carnations, *Dianthus caryopyhllus*	Caryophyllaceae	Fl A

KAZAKHSTAN **2019 November 27** (Flowers & "Congratulations" in various languages) SS/1

897	800te	Apple blossoms, *Malus domestica*	Rosaceae	Fl A SS Z

KOREA (South) **2019 December 27** (Technology) Set/8

2565		Block of 8		
2565a	380w	Rice growing technology, *Oryza sativa*	Poaceae	Fr A S

KOSOVO **2018 August 24** (Flowers) Set/5

385	30c	Yarrow, *Achillea clypeolata*	Asteraceae	Fl A
386	40c	*Viola dukadjinica*	Violaceae	Fl A
387	60c	Yellow crocus, *Crocus flavus*	Iridaceae	Fl A

KOSOVO (continued)

388	80c	Red chamomile, *Adonis microcarpa*	Ranunculaceae	Fl A
389	90c	Edelweiss, *Leontopodium alpinum*	Asteraceae	Fl A

LATVIA **2020 May 29** (Int. Yr. of Plant Health) Single

1051	€2.25	Stylized plant	V A S

MACAO **2020 April 20** (Medicinal plants) Set/4, SS/1

1595a	2.50p	Rose myrtle, *Rhodomyrtus tomentosa*	Myrtaceae	Fl Fr A
1595b	4p	Dwarf ylang-ylang, *Desmos chinensis*	Annonaceae	Fl Fr A
1595c	4.50p	Cape jasmine, *Gardenia jasminoides*	Rubiaceae	Fl Fr A
1595d	6p	Ivy tree, *Schefflera heptaphylla*	Araliaceae	Fl Fr A
1596	14p	Chinese chrysanthemum, *Chrysanthemum indicum*	Asteraceae	Fl Fr A SS
		Margin: Frangipani, *Plumeria rubra*	Apocynaceae	Fl A SS Z
		Honeysuckle, *Lonicera japonica*	Caprifoliaceae	Fl A SS Z
		Red cotton tree, *Bombax ceiba*	Malvaceae	Fl A SS Z

ROMANIA **2020 March 8** (Dimitrie Brandza Botanical Garden, 160 y) Set/4

6395	2.20l	Lily magnolia, *Magnolia liliiflora*	Magnoliaceae	Fl A
6395a		Sheet of 5 + label		
6396	2.70l	Mexican pincushion, *Mammillaria magnimamma*	Cactaceae	Fl A
6396a		Sheet of 5 + label		
6397	3.30l	*Tulipa sylvestris* subsp. *australis*	Liliaceae	Fl A
6397a		Sheet of 5 + label		
6398	20.50l	Hocus Pocus rose, *Rosa* 'Hocus Pocus'	Rosaceae	Fl A
6398a		Sheet of 5 + label		

SERBIA **2020 April 22** (Int. Year of Plant Health) SS/1

909	108d	Apples, *Malus domestica*	Rosaceae	Fl Fr A SS Z

SPAIN **2020 February 4** (Murcia, 2020 Gastronomy capital) Single

4417	A2 (75c)	Tomatoes, *Lycopersicon esculentum*	Solanaceae	Fr B
		Eggplant, *Solanum melanogena*	Solanaceae	Fr B
		Banana, *Musa x paradisaica*	Musaceae	Fr B
		Lemon, *Citrus limon*	Rutaceae	Fr B

2020 March 20 (Gastronomy of Asturias) SS/2

4426		Sheet of 2		
4426a	€3	Fava beans, *Vicia faba*	Fabaceae	Fr B SS Z
4426b	€3	Apple cider, *Malus domestica*	Rosaceae	Fr B SS Z

SRI LANKA **2019 December 13** (Provincial Flowers) Set/3

2209	12r	*Dendrobium maccarthiae*	Orchidaceae	Fl A
2210	15r	*Osbeckia octandra*	Melastomaceae	Fl A
2211	45r	*Rhododendron zeylanicum*	Ericaceae	Fl A

TUVALU **2019 April 2** (Plumeria) Set/3

1434		Sheet of 3		
1434a	$2	Plumeria flowers, *Plumeria rubra*	Apocynaceae	Fl A MS Z
1434b	$3	Same species		
1434c	$4	Same species		

UNITED STATES **2020 July 17** (Fruits and vegetables) Set/10

5484	(55c)	Plums, *Prunus domestic*a	Rosaceae	Fr A
5485	(55c)	Tomatoes, *Lycopersicon esculentum*	Solanaceae	Fr A
5486	(55c)	Carrots, *Daucus carota*	Apiaceae	V A
5487	(55c)	Lemons, *Citrus limon*	Rutaceae	Fr A
5488	(55c)	Blueberries, *Vaccinium corymbosum*	Ericaceae	Fr A
5489	(55c)	Grapes, *Vitis vinifera*	Vitaceae	Fr A
5490	(55c)	Lettuce, *Lactuca sativa*	Asteraceae	V A
5491	(55c)	Strawberries, *Fragaria ananassa*	Rosaceae	Fr A
5492	(55c)	Eggplant, *Solanum melongena*	Solanaceae	Fr A
5493	(55c)	Figs, *Ficus carica*	Moraceae	Fr A
5493a		Block of 10, #5484-93		
5493b		Booklet pane of 20 #5484-93		

UZBEKISTAN **2020 March 20** (Navroz holiday) SS/1

911	11,200s	Apple blossoms, *Malus domestica*	Rosaceae	Fl B SS Z

VATICAN CITY **2020 June 23** (Int. Year of Plant Health) Single

1740	€1.15	Pope & Catholicos Karekin II watering tree	T B U

New Plants in the Philatelic Herbarium

By Christopher E. Dahle, BU 1269

Echinocereus chisoensis CACTACEAE

Common name: Chisos hedgehog cactus

Synosyms: *E. metornii, E. fobeanus* subsp. *metornii*

Succulent perennial with solitary stems to 30 cm, 3-5 cm wide, having 10-16 ridges tipped with numerous spines, 6-20 mm. Pink or red flowers 2.5 to 7 cm wide, 6 cm long appear in March-April. Found in Chihuahuan Desert shrub-lands or grasslands on gravelly soils, in Texas and Mexico

Turkish Republic of Northern Cyprus Scott #831a. Issued 24 Sept. 2019 in a set of 2 in sheets of 12.

Myrrhinium atropurpureum var. octandrum MYRTACEAE

Common name: Palo de Fierro

Synonyms: *M. lanceolatum, M. loranthoides, M. octandrum, M. peruvianum. M. rubiflorum, M. salicinum, M. sarcopetalum, Tetrastemon loranthoides*

Evergreen shrub to 4.5 m. Leaves leathery 3.2-4.7 cm long, 1-2 cm wide. Flowers in clusters of 11-15, 12-15 mm diameter, directly on branches, have pearly white petals with long red stamens. Found in secondary montane forests to 2,000 m in Colombia, Ecuador, Peru, Brazil, Agentina and Uruguay.

Uruguay Scott # 2696a. Issued 25 Nov. 2019 titled Spring Series 2019. Designed by Daniel Pereyra and printed by Sanfer srl, Montevideo in sheets of 8 in a quantitiy of 15,000.

Luehea divaricata MALVACEAE

Common name: Francisco Álvarez tree

Synonyms: *Alegria divaricata, Brofera mediterranea, Thespesia brasiliensis*

Tree to 20 m. Simple, alternate leaves, trinervated, 7-9 cm x 3-5 cm. White flowers with yellow tints, January to Jjuly. Wood used in carpentry. Found in riverine mountain areas, from Brazil, Paraguay, Uruguay and Argentina.

Uruguay Scott #2696c. Issued 25 Nov. 2019 for the Spring Series 2019.

Hypericum connatum HYPERICACEAE

Common name: Oreja de gato

Synonyms: *H. chlorifolium, H. connatum* var. *chlorifolium, H. connatum* var. *fiebrigii, H. connatum* var. *paraguariense, H. cyathifolium, Sarothra connata*

Perennial plant 23-100 cm. Opposite leaves fuse around stems. Ornamental and medicinal plant with yellow flowers. Found in pastures and dry rocky areas to 2,000 m in Argentina, Uruguay, Paraguay, Brazil and Bolivia.

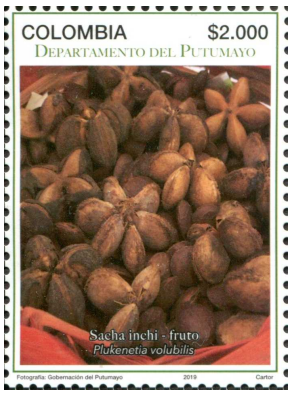
Uruguay Scott #2696d. Issued 25 Nov. 2019 for Spring Series 2019.

Alhagi psuedalhagi FABACEAE

Common name: Camelthorn

Undershrub 60-90 cm. Leaves simple, alternate, 1 to 2.5 cm by 3-8 mm, obovate or elliptic. Flowers 0.5-1 cm long, 0.2-0.5 cm broad, on spine-tipped branches, appear April-September, pink or reddish violet. Fruit 2-3.5 cm by 2-3 mm. Range: temperate and tropical Eurasia and Middle East. Used in Ayurvedic medicine.

Uzbekistan Scott #906c. Issued 10 Dec. 2019 in a sheet of 6 for Flora and fauna of Kyzylkum State Reserve. Drawn by Kim A. and designed by Kanvets E. Printed by multicolor offset on coated paper in 8,000 copies.



Plukenetia volubilis EUPHORBIACEAE

Common names: Inca nut, sacha inchi, sacha peanut, mountain peanut

Synonyms: *Fragariopsis paxii, Plukenetia macrostyla, P. peruviana, Sajorum volubile*

Evergreen climber to 2 m. Leaves 10-12 cm by 8-10 cm, alternate, cordate, serrate, covered with trichomes. Male flowers small white in clusters. Female flowers at base of inflorescence. Grows in disturbed areas or forest edges of lowland moist or wet forest below 900 m. Range: Brazil, Bolivia, Peru, Ecuador, Colombia, Venezuela, Surinam and Caribbean islands. Cultivated for many years. Leaves and roasted seeds are eaten, oil from nuts used in cosmetics.

Colombia Scott #1533j. Isssued 27 Dec. 2019 in a minisheet of 12 promoting the Department of Putumayo. Perforated 13½ x 13. Printed by Cartor Security Printing, in a run of 53,892 stamps.

Viola dukadjinica VIOLACEAE

Perennial herb. Flowers yellow. Found on stony slopes, serpentine soils and subalpine meadows. Range: N. & E. Albania to NW. Greece. 1900-2600 m.

Kosovo Scott #386. Issued 24 August 2018 as part of a set of 5 flowers.

Mammillaria magnimamma CACTACEAE

Common names: Mexican pincushion

Synonyms: *M. centricirrha, M. flavovirens, M. gladiata, M. macrantha, M. pentacantha, M. phymattothele, M. zuccainiana*

Perennial succulent, solitary at first, branching basally to produce a mound 50 cm diameter to 30 cm tall. Stems flattened to globose, 10-13 cm diameter, gray to greenish blue. Flowers in spring, white or cream with red midveins to deep purplish pink, 20-25 mm wide, long and in diameter. Grow on rocky substrates, including lava fields, in open xerophyllous vegetation. Widespread in central Mexico, 100 -2700 m.

Romania Scott #6396. Issued 3 March 2020 in a set of 4 for the 160th anniversary of the Dimitrie Brandza Botanical Garden in Bucharest. Designed by George Ursachi. Printed in sheets of 32 (35,712 stamps printed) and in minisheets of 5 stamps and a label (4,200 printed) by offset in 4 colors on chromo-gummed paper of British origin.

Schefflera heptaphylla ARALIACEAE

Common name: Ivy tree
Synonyms: 15 synonyms
Tree to 25 m. Semi-deciduous with 6-9 leaflets on petioles 10-30 cm. Leaflets elliptic to oblong, 7-18 cm by 3-5 cm. Panicles of yellowish green flowers from fall to early winter. Blueish black berries. Found in open forest and forest edges of evergreen broad-leaved forests on mountain slopes 100-2100 m in China, Japan, Myanmar, Thailand, Laos, Vietnam and Philippines. Bark and leaves used medicinally.

Macao Scott #1595d. Issued 20 April 2020 in a series of Medicnal Plants four stamps and a souvenir sheet. Designed by Lui Chak Keong. Printed by offset lithography with microprinting on paper with security fibers by Joh. Enschedé Security Print, The Netherlands in a quantitiy of 250,000.

Capparis zoharyi CAPPARACEAE

Common name: Jerusalem caper
Shrub, erect with twigs to 2 m, green to reddish purple. Stipules curved, decurrent, orange 0.3-0.6 cm long. Leaves rounded rarely ovate, 2-4 x 2-4 cm. Flowers March to October. Buds rounded. Flowers white with pink stamens. Found growing on walls, rocks and slopes in Mediterranean Europe, North Africa, Israel, Jordan, Lebanon, Syria at elevations 0-200 m.

Israel Scott #2263. Issued 9 June 2020 in a series of 3 featuring Summer Flowers. Designed by Tuvia Kurtz and Ronen Goldberg. Printed by offset with a microtext security mark by Cartor Security Printing in France in sheets of 15 with 5 labels.

Osbeckia octandra MELASTOMACEAE

Comon name: Eight stamen osbeckia, heen bovitiya (Sinhala)
Subshrub with spreading habit to 2 m. Leaves, eliptical 1.5-6 x 0.5-2 cm with prominent veins. Flowers, 5-8 cm, pink to mauve and purple, solitary or in loose clusters. Grows closes to water in grasslands or woolands in Sri Lanka and in evergreen forest in the Western Ghats of India. Used in Ayurvedic medicine for liver ailments.

Sri Lanka Scott #2210. Issued on 13 December 2019 in a set of 3 Provincial Flowers. Designed by P. Isuru Chatthuranga. Printed in 4 colors on sheets of 100, in quanttity of 300,000.

POCZTA POLSKA BUTTERFLIES FROM CENTRAL AND SOUTH AMERICA

From the official phileatlic site of Poczta Polska comes the following:

On October 8 this year 4 postage stamps with a value of PLN 3.30 issued "Butterflies" were put into circulation.

The individual stamps show butterflies from South and Central America:

1) on the first - the Central American butterfly, *Danaus plexippus*, along the left edge of the stamp there is the name of the butterfly: *Danaus plexippus,* and along the upper edge the name of the issue: Butterflies,

2) on the second - the American butterfly South, *Agrias narcissus*, along the left edge of the stamp there is the name of the butterfly: *Agrias narcissus*, and along the top edge the name of the issue: Butterflies,

3) on the third - South America butterfly, *Morpho helene*, along the left edge of the stamp are the name of the butterfly: *Morpho helene*, and along the top edge top edge issue name: Butterflies,

4) on the fourth - the South American butterfly, *Morpho portis*, along the left edge of the stamp there is the name of the butterfly: *Morpho portis*, and along the top edge the name of the issue: Butterflies.

In the lower right corner of the stamps mentioned in sec. 2 there is an inscription: POLSKA, and in the upper left corner their value is PLN 3.30. The stamps were printed using the offset technique, on fluorescent paper, in the 45 x 45 mm format, in a circulation of 168,000 each. The sales sheet contains 8 stamps.

On this occasion, 4 FDC envelopes were issued.

The author of the project: Andrzej Gosik

http://filatelistyka.poczta-polska.pl

MAMMALIA

Editor
Michael Prince, LM68

New Listings

Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
AUSTRALIA		**2019 December 16** (Marsupials) Set/4 perf 14x14¼		
5055	$1.10	Koala, *Phascolarctos cinereus*	Phascolarctidae	A
5056	$1.10	Common Wombat, *Vombatus ursinus*	Vombatidae	A
5057	$2.20	Short-beaked Echidna, *Tachyglossus aculeatus*	Tachyglossidae	A
5058	$3.30	Sugar Glider, *Petaurus breviceps*	Petauridae	A
		SA die cut 11¼		
5059	$1.10	Koala, *Phascolarctos cinereus*	Phascolarctidae	A
5059a		Booklet pane of 10		
5060	$1.10	Common Wombat, *Vombatus ursinus*	Vombatidae	A
5060a		Booklet pane of 20		
5060b		Horiz. coil pair #5059, 5060		
		2020 January 21 (Tree-dwelling Mammals) Set/3, SS/3		
5089	$1.10	Bennett's Tree Kangaroo, *Dendrolagus bennettianus* NEW	Macropodidae	A
5090	$1.10	Spectacled Flying Fox, *Pteropus conspicillatus* NEW	Pteropodidae	A
5091	$1.10	Lemuroid Ringtail Possum, *Hemibelideus lemuroides* NEW	Pseudocheiridae	A
5091a		Souvenir sheet of 3 #5089-91		
BELARUS		**2020 January 9** (Young Carnivores) Set/4, SS/8		
1166	NVI (54k)	Red Fox, *Vulpes vulpes*	Canidae	A
1167	NVI (1.32r)	Grey Wolf, *Canis lupus*	Canidae	A
1168	NVI (1.56r)	Brown Bear, *Ursus arctos*	Ursidae	A
1169	NVI (1.68r)	Eurasian Lynx, *Lynx lynx*	Felidae	A
BULGARIA		**2020 January 29** (New Year 2020 – Year of the Rat) SS/1		
4928	3l	Brown Rat, *Rattus norvegicus*	Muridae	A
CROATIA		**2020 February 20** (Small Mammals) Set/4		
1166a	3.10k	Shetland Pony, *Equus caballus*	Equidae	A
1166c	3.10k	Four-toed Hedgehog, *Atelerix albiventris*	Erinaceidae	A
1166d	3.10k	Vietnamese Pot-bellied Pig, *Sus scrofa domesticus*	Suidae	A
CUBA		**2019 November 22** (Bats) Set/5, SS/1		
6220	5c	Cuban Greater Funnel-eared Bat, *Natalus primus* NEW	Natalidae	A
6221	20c	Cuban Lesser Funnel-eared Bat, *Chilonatalus macer* NEW	Natalidae	A
6222	30c	Lesser Little Mastiff Bat, *Mormopterus minutus* NEW	Molossidae	A
6223	85c	Cuban Yellow Bat, *Lasiurus insularis* NEW	Vespertilionidae	A
6224	90c	Cuban Evening Bat, *Nycticeius cubanus* NEW	Vespertilionidae	A
6225	1p05	Cuban Flower Bat, *Phyllonycteris poeyi* NEW	Phyllostomidae	A
6226	1p	Pallid Bat, *Antrozous pallidus koopmani*	Vespertilionidae	A SS

DENMARK **2020 January 2** (Mammals) Set/5

1835	10k	European Roe Deer, *Capreolus capreolus*		Cervidae	A
1836	10k	West European Hedgehog, *Erinaceus europaeus*		Erinaceidae	A
1837	10k	Red Squirrel, *Sciurus vulgaris*		Sciuridae	A
1838	10k	Hazel Dormouse, *Muscardinus avellanarius*		Gliridae	A
1839	10k	Stoat (Ermine), *Mustela erminea*		Mustelidae	A
1839a		Booklet pane of 10, 2 each			

ECUADOR **2019 October 29** (Tiputini Biodiversity Station, 25th Anniversary) Sheet/9

2242a	25c	Smoky Bat, *Amorphochilus schnablii*	NEW	Vespertilionidae	A
2242b	50c	Tschudi's Tailless Bat, *Anoura peruana*	NEW	Phyllostomidae	A
2242c	75c	Vampire Bat, *Desmodus rotundus*		Phyllostomidae	A
2242d	$1	Northern Ghost Bat, *Diclidurus albus*	NEW	Emballonuridae	A
2242e	$1.25	Guainan Bonneted Bat, *Eumops maurus*	NEW	Molossidae	A
2242f	$1.50	Lesser Bulldog Bat, *Noctilio albiventris*	NEW	Phyllostomidae	A
2242g	$1.75	Visored Bat, *Sphaeronycteris toxophyllum*	NEW	Phyllostomidae	A
2242h	$5	Fringe-lipped Bat, *Trachops cirrhosus*	NEW	Phyllostomidae	A

2019 November 22 (Tourism)

2245		Booklet pane of 8, a-h			
2245d	50c	Galapagos Sea Lion, *Zalophus wollebaeki*		Otariidae	A
2246d	50c	Humpback Whale, *Megaptera novaeangliae*		Balaenopteridae	A

FAROE ISLANDS **2020 February 24** (Seal Pup)

745	20k	Grey Seal, *Halichoerus grypus*		Phocidae	A
		SA die cut 13x12¾			
746	20k	Grey Seal, *Halichoerus grypus*		Phocidae	A

FINLAND

Aland **2020 October 24** (New Year 2020 – Year of the Rat) SS/2

427a	60c	Long-tailed Field Mouse, *Apodemus exulans*		Muridae	A SS Z
427b	60c	Long-tailed Field Mouse, *Apodemus exulans*		Muridae	A SS Z

FRANCE **2020 February 7** (Animals and Their Reflections in Water) Set/12

5783	NVI(97c)	Plains Zebra, *Equus quagga*		Equidae	A
5784	NVI(97c)	Siberian Tiger, *Panthera tigris altaica*		Felidae	A
5785	NVI(97c)	Lion, *Panthera leo*		Felidae	A
5786	NVI(97c)	Grey Seal, *Halichoerus grypus*		Phocidae	A
5787	NVI(97c)	Polar Bear, *Ursus maritimus*		Ursidae	A
5790	NVI(97c)	Llama, *Lama glama*		Camelidae	A
5794	NVI(97c)	Humpback Whale, *Megaptera novaeangliae*		Balaenopteridae	A
5794a		Booklet pane of 12 #5783-94			

2020 March 6 (Cabinet of Curiosities) Set/12

5808	NVI(97c)	Indian Rhinoceros, *Rhinoceros unicornis*		Rhinocerotidae	A
5809	NVI(97c)	Giant Pangolin, *Manis gigantea*		Manidae	B
		Seven-banded Armadillo, *Dasypus septemcinctus*		Dasypodida	B
		Nine-banded Armadillo, *Dasypus novemcinctus*		Dasypodidae	B
		Nine-banded Armadillo, *Dasypus novemcinctus*		Dasypodidae	B
5810a		Booklet pane of 12, #5799-5810			

FRENCH POLYNESIA **2020 January 24** (New Year 2020 – Year of the Rat) Single

1242	140fr	Polynesian Rat, *Rattus exulans*	NEW	Muridae	A

GREAT BRITAIN

Guernsey **2020 May 2** (Giraffe) SS/1

1547	£3	Kordofan Giraffe, *Giraffa camelopardalis antiquoram*	Giraffidae	A SS Z

ICELAND **2020 May 7** (Whale Watching) Set/2

1517	NVI(315k)	North Atlantic Right Whale, *Eubalaena glacialis*	Balaenidae	A

KENYA **2018 May 11** (Last Remaining Northern Rhinoceroses) Set/3, SS/1

910	50sh	Northern White Rhinoceros, *Ceratotherium simum cottoni*	Rhinocerotidae	A
911	130sh	Same species		A
912	160sh	Same species		A
913	200sh	Same species		A SS

ROMANIA **2020 January 28** (Animals of Arctic Areas) Set/4

6375	1l80	Grey Wolf, *Canis lupus*	Canidae	A
6375a		Sheet of 5 + label		
6377	7l	Arctic Fox, *Vulpes lagopus*	Canidae	A
6377a		Sheet/5 + label		
6378	19l	Arctic Hare, *Lepus arcticus*	Leporidae	A
6378a		Sheet/5 + label		

SRI LANKA **December 30, 2019** (Elephant Casket Bearer) Single

2213	15r	Asiatic Elephant, *Elephas maximus*	Elephantidae	A

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

3077	3b	Bryde's Whale, *Balaenoptera edeni*		Balaenopteridae	A
3078	3b	Omura's Whale, *Balaenoptera omurai*	NEW	Balaenopteridae	A

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

1166	60p	Leopard Seal, *Hydrurga leptonyx*	Phocidae	A

TUVALU **2019 April 10** (Dolphins) Sheet/3, SS/1

1435a	$2	Striped Dolphin, *Stenella coeruleoalba*	Delphinidae	A
1435b	$2	Same species		A
1435c	$2	Same species		A
1436	$7	Same species		A SS

ORNITHOLOGY

Editor

Glenn G. Mertz, BU 1455

Corrections/Updates

HUNGARY, 67 (1), page 41Correction: Sc#4436, value should be 350fo, not 300fo

GREAT BRITAIN (Jersey), V68(2), page 127
Correction: Sc#2172, listed as Barn Owl, should be Barn Swallow.

KOSOVO, V68(3), page 130
Correction; Sc#366c misspelled as Startling, correct spelling to Starling.

KYRGYZSTAN, V58(1), page 32
Correction: Sc#82. Genus name should be *Anthropoides*, not *Grus*.

MONGOLIA, V67(1), page 41
Correction: Sc#2877 , Snowy Owl. Genus name should be *Scandiacus*, not *Scandica*.

CUBA, V69(2), page 109.
Correction: Cuba Sc#6113. Correct value from 92c to 90c.

COOK ISLAND, V69(2), page 107
Correction: Sc#1594a, did not have the species name listed of *Tenuirostris*. Add this to the listing for Sc#1594a.

ESTONIA, V68(4), page 266
Correction: "Same species" in flight should be Sc#894

DENMARK, V69(1), page 39
Correction: Sc#814. English name missing, should be Mute Swan.

NORTH MACEDONIA, V68)4), page 268
Correction: Sc#814 should be listed as Eurasian Marsh-Harrier, not Eurasian March-Harrier.

PAPUA NEW GUINEA, V67(3), page 230
Update: N/A for the SS, 13k value should be Sc#1880.

ROMANIA, V69(1), page 48
Correction: Genus name should be *Tetrao*, not *Lyrurus*, which is captioned on the stamp.

ST. MARTIN, V68(1), page 43
Correction: Sc#166. Correct English name to Red-tailed Black-Cockatoo.

TONGA, V68(4), page 273
Correction: Sc#1335s should be Sc#1334a

SOLOMON ISLANDS, V64(4), page 259
Correction: SS should be Sc#1218

New issues

Scott#	Denom	Commonname/Scientific Name	Family/Subfamily	Code
ANTIGUA & BARBUDA		**2018 November 1** (Apollo 11 Landing 50y) Set/3		C*
3435a-c	$6.00	Bald Eagle, *Haliaeetus leucocephalus*	Accipitridae	
3436	$10.00	Same species. Contains one stamp 38x1 mm		
AUSTRALIA		**2020 April 21** (State & Territory Birds) Set/6		A*
5134	$1.10	Gang-gang Cockatoo, *Callocephalon fimbriatum*	Cacatuidae	
5135	$1.10	Helmeted-tufted Honeyeater, *Lichenostomus cratitius*	Meliphagidae	
5136	$1.10	Wedge-tailed Eagle, *Aquila audax*	Accipitridae	
5137	$1.10	Laughing Kookaburra, *Dacelo novaeguineae*	Alcedinidae	
5138	$1.10	Brolga, *Antigone rubicunda*	Gruidae	
5139	$1.10	Black Swan, *Cygnus atratus*	Anatidae	
5140a-5145a		Same six birds in SA format		
AZERBAIJAN		**2019 December 4** (Landscapes) Set of 8 SS		B*
1263	1m SS	White Stork, *Ciconia ciconia*	Ciconiidae	
CAMBODIA		**2019 April 24** (Tonle Sap) Set/7, SS/2		A*
2512	900r	Sarus Crane, *Antigone antigone*	Gruidae	
2518	6000r	Helmeted Hornbill, *Buceros vigil*	Bucerotidae	
N/A	6000r SS**	Oriental Darter, *Anhinga melanogaster*	Anhingidae	

Note:--This SS, existing with a different bird, has no assigned number because it exists in limited quantities.

CARIBBEAN NETHERLANDS **2018 June 19** Set/24 A*

Back in V66(3), page 210, I listed a set of 24 stamps issued September 9, 2016, which Scott Publishing had not yet assigned numbers to. If you read that article about the stamps, which Scott isted as "Personalized" and the reason for not listing them, you will get an understanding aboutthese same 24 stamps, that have been reissued by the Caribbean Netherlands, and again not gettingassigned numbers. This new issuance of the same stamps now have a value of $.99, versus $.88 on the 2016 issued stamps. On the 2016 issued stamps I "assigned" my own numbers 47a-t, which you will not find in a Scott Publication.

I'm relisting these same stamps again, more for the subscribers to this journal, but will not "assign" my own numbers but will list them as N/As.

N/A	99c	Bananaquit, *Coereba flaveola*	Thraupidae
N/A	99c	Stilt Sandpiper, *Calidris himantopus*	Scolopacidae
N/A	99c	Ruddy Turnstone, *Arenaria interpres*	Scolopacidae
N/A	99c	Green Heron, *Butorides virescens*	Ardeidae
N/A	99c	Sanderling, *Calidris alba*	Scolopacidae
N/A	99c	Great Egret, *Ardea alba*	Ardeidae
N/A	99c	Ruby-throated Hummingbird *Archilochus colubris*	Trochilidae
N/A	99c	Brown-throated Parakeet, *Eupsittula pertinax anthogenia*	Psittacidae
N/A	99c	Yellow-shouldered Parrot, *Amazona barbadensis*	Psittacidae
N/A	99c	Whimbrel, *Numenius phaeopus*	Scolopacidae
N/A	99c	Peregrine Falcon, *Falco peregrinus*	Falconidae

CARIBBEAN NETHERLANDS (continued)

N/A	99c	American Flamingo, *Phoenicopterus ruber*	Phoenicopteridae
N/A	99c	American Golden-Plover, *Pluvialis dominica*	Charadriidae
N/A	99c	Tropical Mockingbird, *Mimus gilvus*	Mimidae
N/A	99c	Semipalmated Sandpiper, *Calidris pusilla*	Scolopacidae
N/A	99c	Little Egret, *Egretta garzetta*	Ardeidae
N/A	99c	Venezuelan Troupial, *Icterus icterus*	Icteridae
N/A	99c	Reddish Egret, *Egretta rufescens*	Ardeidae
N/A	99c	American Yellow Warbler, *Setophaga petechia aestiva*	Parulidae
N/A	99c	Osprey, *Pandion haliaetus*	Pandionidae
N/A	99c	Lesser Yellowlegs, *Tringa flavipes*	Scolopacidae
N/A	99c	Brown Pelican, *Pelecanus occidentalis*	Pelecanidae
N/A	99c	Wilson's Snipe, *Gallinago delicata*	Scolopacidae
		2019 October 4 Set/24, inscribed "Saba"	A*
111a	150c	Semipalmated Plover, *Charadrius semipalmatus*	Charadriidae
111b	150c	American Redstart, *Setophaga ruticilla*	Parulidae
111c	150c	Blue-winged Teal, *Spatula discors*	Anatidae
111d	150c	Brown Pelican, *Pelecanus occidentalis*	Pelecanidae
111e	150c	Bridled Tern, *Onychoprion anaethetus*	Laridae
111f	150c	Black-and-white Warbler, *Mniotilta varia*	Parulidae
111g	150c	Red-footed Booby, *Sula sula*	Sulidae
111h	150c	Belted Kingfisher, *Megaceryle alcyon*	Alcedinidae
111i	150c	Green-throated Carib, *Eulampis holosericeus*	Trochilidae
111j	150c	Osprey, *Pandion haliaetus*	Pandionidae
111k	150c	White-tailed Tropicbird, *Phaethon lepturus*	Phaethontidae
111l	150c	Northern Parula, *Setophaga americana*	Parulidae
111m	150c	Carib Grackle, *Quiscalus lugubris*	Icteridae
111n	150c	Hen Harrier, *Circus cyaneus*	Accipitridae
111o	150c	Yellow-bellied Sapsucker, *Sphyrapicus varius*	Picidae
111p	150c	Lesser Antillean Bullfinch, *Loxigilla noctis*	Thraupidae
111q	150c	Lesser Yellowlegs, *Tringa flavipes*	Scolopacidae
111r	150c	Yellow-crowned Night-Heron, *Nyctanassa violacea*	Ardeidae
111s	150c	Bananaquit, *Coereba flaveola*	Thraupidae
111t	150c	Laughing Gull, *Leucophaeus atricilla*	Laridae
ECUADOR		**2019 November 22** (Tourism) set/8	A*
2245e	$0.75	Waved Albatross, *Phoebastria irrorata*	Diomedeidae
2245f	$0.75	Swallow-tailed Gull, *Creagrus furcatus*	Laridae
FRANCE		**2019 November 12** (Tromelin Island) Single	B*
5760	€1.30	Masked Booby, *Sula dactylatra*	Sulidae
		Red-footed Booby, *Sula sula*	Sulidae
		2020 February 7 (Animals & their Reflectionsin Water) Set/12	A*
5788	(97c)	King Penguin, *Aptenodytes patagonicus*	Spheniscidae
5789	(97c)	Greater Flamingo, *Phoenicopterus ruber*	Phoenicopteridae

FRANCE (continued)

5792	(97c)	Squacco Heron, *Ardeola ralloides*	Ardeidae
5793	(97c)	Herring Gull, *Larus argentatus*	Laridae
		2020 March 6 (Curiosities) Set/12	A*
5803	((97c)	Burrowing Owl, A*thene cunicularia*	Strigidae

GREAT BRITAIN (Alderney) **2019 July 24** (John Keats 200th Anniversary) Set/6 B*

630	80p	Common Nightingale, *Luscinia megarhynchos*	Muscicapidae

GREENLAND **2019 June 21** (Europa) Set/2 A*

817	15k	Rock Ptamigan, *Lagopus muta* (UR)	Phasianidae
		Mallard, *Anas platyrhynchos* (LR)	Anatidae
817	17k	Snow Bunting, *Plectrophenax nivalis* (LS)	Calcariidae
		Northern Raven, *Corvus corax* (CTR)	Corvidae

GRENADA **2019 February 11** (Parrot type of 2013) Single A*

3928a	50c	Golden-capped Parakeet, *Aratinga auricapillus*	Psittacidae

GUINEA-BISSAU **2020 February 7** (Warblers) Set/4, ss/1 A*

N/A	150fr	Aquatic Warbler, *Acrocephalus paludicola*	Acrocephalidae
N/A	500fr	Cetti's Warbler, *Cettia cett*i New	Scotocercidae
N/A	750fr	Common Chiffchaff, *Phylloscopus collybita*	Phylloscopidae
N/A	1500fr	Dartford Warbler, *Sylvia undata*	Sylviidae
N/A	3000fr SS	Garden Warbler, *Sylvia borin*	Sylviidae
	Margin	Eurasian Blackcap, *Sylvia atricapilla* (LL)	Sylviidae
		Sedge Warbler, A*crocephalus schoenobaenus* (LR)	Acrocephalidae
		2020 February 7 (Owls) Set/4, SS/1	A*
N/A	100ffr	Great Gray Owl, *Strix nebulosa*	Strigidae
N/A	500fr	Barn Owl, *Tyto alba*	Tytonidae
N/A	750fr	Snowy Owl, *Bubo scandiacus*	Strigidae
N/A	1500fr	Little Owl, *Athene noctua*	Strigidae
N/A	3000fr SS	Long-eared Owl, *Asio otus*	Strigidae
	Margin	Barn Owl, *Tyto alba*	

Tytonidae

		Snowy Owl, *Bubo scandiacus*	Strigidae
		2020 February 7 (Birds of Paradise) Set/4, SS/1	A*
N/A	100fr	King Bird-of-Paradise, *Cicinnurus regius*	Paradisaeidae
N/A	500fr	Raggiana Bird-of-Paradise, *Paradisaea raggiana*	Paradisaeidae
N/A	750fr	Same species	
N/A	1500fr	Wilson's Bird-of-Paradise, *Cicinnurus respublica*	Paradisaeidae
N/A	3000fr SS	Greater Bird-of-Paradise, *Paradisaea apoda*	Paradisaeidae
	Margin	Lesser Bird-of-Paradise, *Paradisaea minor* (LL)	Paradisaeidae
		Black Sicklebill, *Epimachus fastuosus* (LR)	Paradisaeidae
		2020 February 27 (KIngfishers) Seet/4, SS/1	A*
N/A	800fr	Crested Kingfisher, *Megaceryle lugubris*	Alcedinidae
N/A	800fr	Little Kingfisher, *Ceyx pusillus*	Alcedinidae

GUINEA-BISSAU (continued)

N/A	800fr	Azure Kingfisher, *Ceyx azureus*	Alcedinidae
N/A	800fr	Collared Kingfisher, *Todiramphus chloris*	Alcedinidae
N/A	3300fr SS	Common Kingfisher, *Alcedo atthis*	Alcedinidae
	Margin	Giant Kingfisher, *Megaceryle maxima*	Alcedinidae

2020 February 27 (Owls) Set/4, SS/1 A*

N/A	800fr	Barn Owl, *Tyto alba*	Tytonidae
N/A	800fr	Great Gray Owl, *Strix nebulosa*	Strigidae
N/A	800fr	Snowy Owl, *Bubo scandiacus*	Strigidae
N/A	800fr	Long-eared Owl, *Asio otus*	Strigidae
N/A	3300fr SS	Burrowing Owl, *Athene cunicularia*	Strigidae
	Margin	Eurasian Eagle-Owl, *Bubo bubo*	Strigidae

ITALY **2019 October 4** (Europa) Set/2 A*

3602	(€1.10)	Bonelli's Eagle, *Aquila fasciata*	Accipitridae
3603	(€2.60)	European Goldfinch, *Carduelis carduelis*	Fringillidae

KIRIBATI **2019 July 1** A*

In Vol 69(2), page 112,f I listed the four stamps for this date. At that time no SS was listed.Scott has now noted a sheet, Sc#1057a, for the four stamp of 1054-1057.

LITHUANIA **2020 January 31** Single A*

1160	€0.75	Boreal Owl, *Aegolius funereus*	Strigidae

MACAU **2018 October 9** (Birds and Spring Flowers) Set/4 A*

1537d	5.50p	Indian Peafowl, *Pavo cristatus*	Phasianidae

MONGOLIA **2019** November 18 (Landscapes type of 2018) Set/7 A*

2921	1300t	Whooper Swan, *Cygnus cygnus*	Anatidae
2926	1300t	Saker Falcon, *Falco cherrug*	Falconidae

2019 November 22 (UNESCO Intangible Heritage) Set/5 B*

2929	200t	Golden Eagle, *Aquila chrysaetos*	Accipitridae

NEW ZEALAND **2018 September 21** ((35th Asian International StampExhibition) Set/3 A*

The three stamps are Sc#2811-2813, as listed on page 308,in V67(4). The Sc# for this sheet is 2813ba.

ROSS DEPENDENCY **2019 September 13** (Cape Adare) Set/5 C*

L165	$3.30	Adeliae Penguin, *Pygoscelis adeliae*	Spheniscidae

ROMANIA **2020 January 28** (Arctic animals) Set/4 A*

6376	2l	Snowy Owl, *Bubo scandiacus*	Strigidae
6376a	Sheet of 5 + label		

SOUTH AFRICA **2017 October 11** A

I've been holding a photo of a single stamp on an exhibition SS, and not seeing it get listed by ScottPublishing I emailed them for information. The sheet has a stamp of an African Pygmy Kingfisher, Ispidina picta, and it was for "Sadapex 2017" , which was held in Edenvale, October. 11-14, 2017.The photo also has on the left side of the sheet under the title for "Sadapex 2017" another title of"National Philatelic Exhibition" and below that the following verbage "Sold in aid of PhilatelicPromotion R20.00". The stamp on the exhibition SS, is lised as "Standard Postage"

The reply I received from Martin J. Frankevicz, at Amos Media, for Scott Publishing on August 27, 2020 is as follows. "We

have not listed the Sadapex sheet that was announced in the December 2017New Issues Bulletin put out by the South African Post Office. The announcement said the sale of thesheet has been suspended until further notice. The sheet was not offered on the accompanying orderform in that bulletin, nor was it offered on any later order form. We received the sheet in questionfrom a dealer, but beyond what is mentioned on the December 2017 bulletin, we have no clue as tohow, when or under what circumstances this sheet was offered to the public".

I'll keep the "Sadapex 2017" SS in a pending file should anything be listed by Scott Publishinggoing forward, but at this point it may be a dead issue.

SURINAM **2014 November 24** C*

A SS, Sc#1490a-b, for Suriname's Association with Van Reijen International Agencies, Ltd,(Philatelic Agent) 40th Anniversary, featuring stamps printed by their agent, of which two were birds. Also on the right side of the sheet, in a vertical line is the title "40 Years of Serving SurinamePhilately" and the same on the left side in whatever language is spoken in Suriname.

1490b	$6.00	Paradise Tanager, *Tanager chilensis* (Issued in 1998)	Thraupidae
		Golden-rumped Euphonia, *Euphonia cyanocephala* (Issued in 2005)	Fringillidae

2020 June 3 Set/12 with 4 labels A*

1598a	$3.00	Glittering-throated Emerald, *Amazilia fimbriata*	Trochilidae
1598b	$6.00	Rufous-capped Motmot, *Baryphthengus martii* V69(3)	Momotidae
1598e	$9.00	Amazon Kingfisher, *Chloroceryle amazona*	Alcedinidae
1598d	$10.00	Green Kingfisher, *Chloroceryle americana*	Alcedinidae
1598e	$11.00	Green-and-rufous Kingfisher, *Chloroceryle inda* +label	Alcedinidae
1598f	$12.00	Rufous Jacamar, *Galbula ruficauda*	Galbulidae
1598g	$13.00	Three-toed Jacamar, *Galbula tridactyla* +label	Galbulidae
1598h	$14.00	Black-fronted Nunbird, *Monasa nigrifrons* +label V69(3)	Bucconidae
1598i	$15.00	White-eared Puffbird, *Nystalus chacuru* +label V69(3)	Bucconidae
1598k	$16.00	Blue-crowned Trogon, *Trogon curucui*	Trogonidae
1598k	$20.00	Surucura Trogon, *Trogon surrucura* V69(3)	Trogonidae
1598l	$21.00	Green-backed Trogon, *Trogon viridis*	Trogonidae

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

1165	45p	Yellow-billed Cuckoo, *Coccyzus americanus*	Cuculidae
1168	£2	Indian Yellow-nosed Albatross, T*halassarche chlororhynchos carteri*	Diomedeidae

UNITED NATIONS (NY) **2020 February 17** (Endangered Species) Set/4 A*

1233	$1.20	Egyptian Vulture, *Neophron percnopterus*	Accipitridae
1234	$1.20	Andean Flamingo, *Phoenicoparrus andinus*	Phoenicopteridae
1235a		Block of 4, #1232-1235.	

UNITED NATIONS (Geneva) **2020 February 17** (Endangered Species) Set/4 A*

680	1.50fr	Siberian Crane, *Leucogeranus leucogeranus*	Gruidae
682	1,50fr	Saker Falcon, *Falco cherrug*	Falconidae
683a		Block of 4, #680-683	

UNITED NATIONS (Vienna) **2020 February 17** (Endangered Species) Set/4 A*

656	€0.90	Dalmatian Pelican, *Pelecanus crispus*	Pelecanidae
658a		Block of 4, #655-658	

VANUATU		**2019 October 4** Set/4		A*
1112	90v	Swamp Harrier, *Circus approximans*		Accipitridae
1113	150v	Brahminy Kite, *Haliastur indus*		Accipitridae
1114	180v	Brown Goshawk, *Accipiter fasciatus vigilax*	(ssp)	Accipitridae
1115	300v	Peregrine Falcon, *Falco peregrinus nesiotes*	(ssp)	Falconidae

Brilliant Bugs from the Royal Mail

All six Brilliant Bugs Special Stamps featuring wildlife illustrator Richard Lewington's stunning artwork are presented in a fold-out souvenir containing fascinating facts about the insects and pollination.

President of the Royal Entomological Society, Professor Helen Roy MBE, writes about pollination, the decline in pollinating insects and how we can conserve them.

The set includes three vertical se-tenant pairs of Special Stamps. Two First Class, two £1.45 and two £1.70 stamps.

First Class Common carder bee (*Bombus pascuorum*) This relatively widespread bumblebee feeds on flowers such as the large blue pea.

First Class Painted lady butterfly (*Vanessa cardui)* Thistles are a common source of nectar for these migratory butterflies in Britain.

£1.45 Longhorn beetle (*Rutpela maculata*) This wasp-mimicking beetle is a common visitor of hawthorn flowers in summer.

£1.45 Elephant hawk-moth (*Deilephila elpenor*) Honeysuckle is a favoured source of nectar for this striking species.

£1.70 Marmalade hoverfly (*Episyrphus balteatus*) An important pollinator of crops like oilseed rape, it is also often seen in gardens.

£1.70 Ruby-tailed wasp (*Chrysis ignita agg*.) The adult ruby-tailed wasp feeds on nectar from flowers such as angelica.

Stamp specifications

Stamp format: Over-square landscape. Stamp size 36.5mm x 34.7mm. Design Royal Mail Group Ltd. Illustrations: Richard Lewington. Printer: International Security Printers. Print process: Lithography. Perforations 14 x 14.5. Phosphor Bars as appropriate. Gum PVA.

Collecting by theme: Birds on stamps

stanleygibbons.com/dispatches/collecting-theme-birds-stamps
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October 15, 2020

Sales Executive Ema Sikic explores some of the most beautiful and exotic birds that have graced stamps from around the world.

North Borneo Palm Cockatoo stamp

North Borneo, as its name suggests, is the northern part of the island of Borneo. This particular term refers to the period when the territory used to be a British protectorate from 1888 and a British Crown colony after 1946. North Borneo was a British protectorate under the sovereign North Borneo Chartered Company from 1882-1946. The company issued its own stamps in March 1883, using a design incorporating the coat of arms (a dhow and a lion), inscribed 'NORTH BORNEO', and with the value written in English, Jawi and Chinese.

North Borneo 1918-30 SGD64 Postage Due, featuring a palm cockatoo.

Stamps of North Borneo boast a wealth of animal species depicted, with different varieties featuring a sun bear, orangutan, rhinoceros, great argus pheasant among others. The quaintest among these are stamps with the palm cockatoo, a smoky dark grey or black bird, with a large black beak and red cheek patches.

This bird appears in two stylistic renditions on stamps, first in this deep blue and black 12c stamp (pictured above), with finely engraved detailed feathers, first issued in 1909. This rendition of the palm cockatoo on this stamp denomination remained in use until the 1930s.

North Borneo Japanese Occupation 1942 SGJ17 Used, featuring a palm cockatoo in a different colour combination.

In 1939, the bird appears in its second rendition on a definitive stamp, somewhat stylistically simplified in a new colour scheme of purple and greenish-blue on 2c stamps (pictured above). Its crest is now perfectly 'coiffed', and the feathers are designated with simplistic linework, the tail feathers are larger and neater. In 1942, North Borneo was occupied by Japanese forces. During the occupation, overprinted stamps of North Borneo and Japan were used.

New Guinea Bird of Paradise stamp

Before 1914 under colonial division, the island of New Guinea was under the control of the German Empire in the North and used its stamps between 1888 and 1897. New Guinea got stamps bearing its name after 1897. After the Australian occupation in 1914, the remaining German stamps and some Australian ones were overprinted. After the Territory of New Guinea became a League of Nations mandate entrusted to Australia in 1925, the country organised the postal system and philatelic production in New Guinea.

The bird of paradise series first appears in August 1931 with dates 1921/1931 commemorating the tenth anniversary of Australian mandate over the territory. The same day, the airmail overprinted series was

New Guinea 1932 SG190/203 Mint Bird of Paradise airmail set without dates.

put on sale. In June 1932, the stamps were issued again, this time without the commemorative dates (pictured above).

Most of this bird species are found in Papua New Guinea and eastern Australia. These birds are best known for their lavish elongated plumage, extending from the beak, wings, tail or head. Societies of New Guinea have often used the plumes in their dress and rituals, and the plumes also proved very popular for ladies' millinery in past centuries in Europe. Unfortunately, the beautiful plumage birds of paradise are famous for led to excessive hunting – they are an endangered species.

New Zealand Kiwi stamp

A long-standing symbol of the country, a beloved animal and a colloquial word for New Zealanders is the Kiwi. Kiwis are endemic to New Zealand, small flightless birds of rotund disposition, they are the absolute icons of New Zealand, so it is not surprising they found their way on national stamps. Postage stamps have been issued in New Zealand since 1855 with the 'Chalon head' stamps featuring Queen Victoria. These were replaced in 1874 with the so-called 'sideface' stamps, also depicting Queen Victoria.

New Zealand 1899-1900 SG260/9 Proof. "Wellington" plate proofs in black on medium meshed wove from the "colonial" plates sent out by Waterlow. Outstanding rarity.

At the very end of the 19th century, first pictorial stamps of New Zealand were created featuring spectacular landscapes and indigenous birds - proofs of these stamps pictured above. The first Kiwi stamps make their appearance on 6d stamps in green colour.

In May 1900, a little more than a year after first Kiwi stamps were printed, their colour was changed to

New Zealand 1902-07 SG312ab
Used, with Kiwi in rose-red

rose-red (pictured). The Kiwi design remained the same as in the original 1898 issue, but it had to be printed in red because the Universal Postal Union required halfpenny stamps to be printed green. This makes the green 6d Kiwis scarcer today.

By 1906 the 1/2d, 3d, 6d and 1s pictorial stamp printing plates needed to be replaced. The designs were simplified and sizes of the 3d, 6d and 1s stamps were reduced making them the same size as the 1d value.

Falkland Islands 1960 Birds Set stamps

A slightly different entry on this list that features fifteen different birds on stamps is also the most modern one, coming from the Falkland Islands. The Falkland Islands are known for their stunning biodiversity and numerous bird species. Land birds make up most of the Falklands' avifauna; with as many as sixty-three species breed on the islands, including sixteen endemic species.

Executed in a minimalistic manner, 1960 Birds Set features simple black line drawings of birds on a plain white background. Each species is named in English, flanked by Queen's portrait on the right which is highlighted in different colours depending on denomination. While the most lovable and recognized animal on Falkland Islands stamps (and philately in general) is the 1933 Centenary 5s Gentoo penguin stamp that we covered already in Dispatches, the 1960 set with 15 native bird varieties is an ornithologist's dream and a more affordable choice for a thematic collector.

Among others, the set features the Gentoo penguin too on the 2d stamp. Falklands are the home to some of the largest albatross colonies in the world, hence the black-browed albatross is featured on the 6d stamp.

Other notable birds include Southern rockhopper penguin on 5½d stamp, Magellanic oystercatcher on 1s stamp and the famous bird of prey – the southern crested caracara - on 10s stamp. Birds that are native to South America, such as the yellow- billed teal, King cormorant and black-necked swan, appear on 1s3d, 5s and £1 stamps in this set.

Falkland Islands 1960 SG193/207 Mint Plate blocks of four. Rare in this form

New Birds in the Philatelic Aviary

By Charles E. Braun, BU 1364

Taxonomic update

The Clements taxonomic update by Cornell was postponed until 2021.

New Birds

TEMMINCK'S STINT, ***Calidris temminckii*** Scolopacidae
Penrhyn, 2018, not yet cataloged, $1.50 Previously on a 1972 ”local” from Nagaland.

Length: 5 to 6 inches, sexes alike, migratory. Dark-patched dull gray to olive brown above and white below with brown streaks on the breast and a white rump and outer tail.
Habitat: Breeds in tundra; winters in wetlands.
Range: Breeds from Norway to northeastern Siberia; winters from the eastern Mediterranean and Senegal to Taiwan and Borneo.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 3.

WILSON'S PHALAROPE, ***Phalaropus tricolor*** Scolopacidae
Penrhyn, 2018, not yet cataloged, $1.50

Length: 9 inches, migratory. The birds on the stamp are in eclipse plumage: pale gray above and white below, with a white forehead and upper trail. The male is an the left, and the female on the right.
Habitat: Breeds in prairie wetlands; winters on mudflats and in saline lakes.
Range: Breeds from Alberta, Canada, to the Great Lakes and east-central California: winters from northeastern Peru to Uruguay and Tierra del Fuego.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 3.

WESTERN PLANTAIN-EATER, ***Crinifer piscitor*** Musophagidae
Sierra Leone, 2020, not yet cataloged, 14,500 Lei Previously on a local from Staffa,
Length: 20 inches (10-inch tail), sexes alike, resident. Gray above and streaked white below, with a dark brown head and upper breast.
Habitat: Open wooded savanna.
Range: Senegal to Congo and the Central African Republic.Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 4.

JUNGLE BOOBOOK, N***inox theomacha*** Strigidae
Romania, 2020, not yet cataloged, 19 l

Length: 6 to 9 inches, sexes similar, resident. Sooty chocolate-brown above and rich chestnut brown below, with pale eyebrows and a gray bill.
Habitat: Lowland forest, gardens and tree groves.
Range: New Guinea and neighboring islands.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 5.

SPANGLED OWLET-NIGHTJAR, ***Aegotheles tatai*** Aegothelidae
Sierra Leone, 2020, not yet cataloged, 10000 Le

Length: 10 inches, sexes alike, resident. Dark rufous above and white-spotted rufous below, with white patches between the eyes.
Habitat: Lowland forest.Range: East-central New Guinea.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 5.

FINE-SPOTTED WOODPECKER, ***Campethera punctuligera*** Picidae
Gambia, 2020, not yet cataloged, 100 d Previously on a Staffa local.

Length: 9 inches, resident. The male (shown on the stamp) is yellow-green above and black spotted white or yellow below with a red crown and a blackish eyestripe; the female has a black forecrown.
Habitat: Wooded savanna and acacia grassland.
Range: Southwestern Mauritania and Senegal to southern Sudan and northeastern Congo.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 7.

EASTERN YELLOW ROBIN, ***Eopsaltria australis*** Petrocidae
Togo, 2020, not yet cataloged, 3300 fr Previously on a Rainbow Creek "local."
Length: 5 to 7 inches, sexes alike, resident. Gray above and yellow below, with an off-white chin and an olive rump and upper tail.
Habitat: Forest, woodland, gardens and parks.
Range: Eastern Australia.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 12.

CETTI'S WARBLER, ***Cettia cetti*** Scotocercidae
Guinea-Bissau, 2020, not yet cataloged, 500 fr

Length: 5 to 6 inches, sexes alike, migratory. Rich rufous-brown above and off-white to pale gray below, with an off-white supercilium.
Habitat: Swampy lowlands and scrubby areas.
Range : Breeds from Southern England and Morocco to northwestern China; winters From England and Morocco to northwestern India.
Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 11.

ENTOMOLOGY

Editors

Don Wright BU243
and Jose Reis BU1889

New Listings

Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
ARUBA		**2020 May 29**		
	90c	Gold Rim, *Battus polydamas* L.	PAP, Papilioninae	A
	130c	Marbled Leafwing, *Hypna clytemnestra rufescens* Butler	NYM, Charaxinae	A
	220c	Common Rose Butterfly, *Atrophaneura aristolochiae* Fabr.	PAP, Papilioninae	A
	420c	Scarlet Mormon, *Papilio deiphobus rumanzovi*a Eschscholtz	PAP, Papilioninae	A
AUSTRALIA		**2020 May 19** (Citizen Science)	New Data	
5148 & 5152	$1.10	Stylized Ladybird Beetle, at L	Coccinellidae	C
		Spotted Jezebel, *Delias aganippe* Donovan, at R	PIE, Pierinae	B
5150 & 5154	$1.10	2 different stylized Butterflies	Lepidoptera	C
5151 & 5155	$1.10	Stylized Mosquito, represents *Aedes aegypti* L. and/or *A. albopictus* Skuse	UL, Culicinae	B
		2020 August 4 (Wildlife Recovery)		
5173	$1.10	Purple or Bathurst Copper, *Paralucia spinifera* Edwards & Common	LYC, Theclinae	A
BELGIUM		**2020 August 31**		
	1st	Asian Ladybird, *Harmonia axyridis* Pallas	COC, Epilachninae	A
	1st	Western Honeybee, *Apis mellifera* L.	API, Apinae	A
BOSNIA & HERZEGOVINA – Serb Admin.		**2020 September 23**		
	10pf	Buff-tailed Bumblebee, *Bombus terrestris* L.	API, Apinae	A
	20pf	European Earwig, *Forficula auricularia* L.	FORF, Forficulinae	A
	90pf	Common Green Lacewing, *Chrysoperla carnea* Stephens	CHRY, Chrysopinae	A
	1.10m	European Mantis, *Mantis religiosa* L.	MAN, Mantinae	A
	2.50m	Hummingbird Hawkmoth, *Macroglossum stellaratum* L.	SPH, Macroglossinae	A
	5m	Western Honeybee, *Apis mellifera* L.	API, Apinae	A
CANADA		**2020 September 21** (Canada Post Community Foundation)		
B30	(92c)+10c	Stylized orange Butterfly	Lepidoptera	C
COLOMBIA		**2020 March 20** (Birds)		
1530	5p	*Megoleria susiana susanna* Staudinger	NYM, Danainae	A
CROATIA		**2020 March 11**		
1169	8.60k	Stylized Termite. Emblem of 84th Croatian Guards Battalion “Termites”	Blattaria	B
CZECH REPUBLIC		**2020 October 8**		
	2k	Common Blue, *Polyommatus icarus* Rottemburg	LYC, Polyommatinae	A
	4k	Clouded Yellow, *Colias croceus* Geoffroy	PIE, Coliadinae	A

FRANCE **2019 January 4** (African Inspired Nature Patterns)

f (Green Letter). 3 Stylized Butterflies Lepidoptera C

2019 October 4 (Porcelain Painting)

L (Green Letter). Colias sp. PIE, Coliadinae C

2020 March 6

(Green Letter). Danaus sp., NYM, Danainae C

2020 June 22 (Vacations – bklt of 12)

(97c). 2 Butterflies Lepidoptera C

GREAT BRITAIN **2020 October 1**

a 1st Common Carder Bee, *Bombus pascuorum* Scopoli API Apinae A

b 1st Painted Lady, *Vanessa cardui* L. NYM, Nymphalinae A

a £1.20 Marmalade Hoverfly, *Episyrphus balteatus* DeGeer SYR, Syrphinae A

b £1.20 Ruby-Tailed Wasp, *Chrysis ignita* L. CHRS, Chrysidinae A

a £1.45 Spotted Longhorn Beetle, *Rutpela maculata* Poda CER, Lepturinae A

b £1.45 Elephant Hawkmoth, *Deilephila elpenor* L. SPH Macroglossinae A

GREAT BRITAIN Jersey **2020 March 26** (Beethoven 250 y)

2310 £2 About 20 *Danaus sp*. NYM, Danainae B

GUYANA **2020 September 30**

a $400 Brown Rhinoeros Beetle, *Xylotrupes gideon* L., ♂ SCA, Dynastinae A

b $400 Harlequin Beetle, *Acrocinus longimanus* L. CER, Lamiinae A

c $400 *Tituboea biguttata* Olivier CHR, Cryptocephalinae A

d $400 European Stag Beetle, *Lucanus cervus* L., ♂ Lucanidae A

$800 Ladybird Beetle. Also in LL margin Coccinellidae A Z

HONG KONG **2020 February 4** (Seasons)

2066 & 2068a $2 "Insects Waken" U/I

2020 May 21 (Ptg by Chen Zi, "Miscellaneous Subject")

2081 & 2084a $3.40 Butterfly. Lepidoptera B

HUNGARY **2020 August 5** (Natural Assets)

185f Spring Dor Beetle, *Trypocopris vernalis* L. (Correction) BOL, Bolboceratinae A

2020 October 8

a 330f Helena Morpho, *Morpho rhetenor helena* Staudinger NYM, Morphinae A

b 330f Sky Blue Morpho, *Morpho portis* Hubner NYM, Morphinae A

c 330f Monarch, *Danaus plexippus* L., ♂ NYM, Danainae A

d 330f *Agrias narcissus* Staudinger NYM, Charaxinae A

JAPAN **2019 November 6**

a 63¥ Stylized Butterfly Lepidoptera B

MALAWI **2020 August** (#741-42 surcharged)

600k on 110k Forest Queen, *Euxanthe wakefieldi* Ward NYM, Charaxinae A

900k on 115k Boisduval's False Acraea, *Pseudacraea boisduvalii* Doubleday NYM, Limenitidinae A

2020 October (#741-42 surcharged)

600k on 110k Forest Queen, *Euxanthe wakefieldi* Ward NYM, Charaxinae A

900k on 115k Boisduval's False Acraea, *Pseudacraea boisduvalii* Doubleday NYM, Limenitidinae A

As above, but print font is larger for surcharge.

MARSHALL ISLANDS **2020 November 2**

a,c,e	$1.50	Black Citrus Swallowtail, *Papilio polytes* L.	PAP, Papilioninae AZ
		Also in LL margin	
b,d,f	$1.50	Beautiful Zebra Blue, *Leptotes pulchra* Murray.	LYC, Polyommatinae AZ
		Also in LR margin	
Margin M-Bottom:		Blue-banded King Crow, *Euploea eunice* Godart	NYM, Danainae Z
	$8	Blue-banded King Crow, *Euploea eunice* Godart	NYM, Danainae A
Margin: Same as on above s/t			Z

PALAU **2020 June 20**

a	$1	Cabbage White, *Pieris rapae* L.	PIE, Pierinae A
b	$1.50	Zebra Longwing, *Heliconius charithonia* L.	NYM, Heliconiinae A
c	$2	Red Admiral, *Vanessa atalanta* L.	NYM, Nymphalinae A
d	$2.50	Pipevine Swallowtail, *Papilio philenor* L.	PAP, Papilioninae A
a	$1	Cabbage White, *Pieris rapae* L.	PIE, Pierinae A
b	$1.50	Zebra Longwing, *Heliconius charithonia* L.	NYM, Heliconiinae A
c	$2	Red Admiral, *Vanessa atalanta* L.	NYM, Nymphalinae A
d	$5	Pipevine Swallowtail, *Papilio philenor* L.	PAP, Papilioninae A

PORTUGAL **2020 October 2**2

53c		Grape Phylloxera, *Daktulosphaira vitifoliae* Fitch	PHYL, Phylloxerinae B
86c		Pine Sawyer Beetle, *Monochamus galloprovincialis* Olivier	CER, Lamiinae B
91c		Mediterranean Fruit Fly, *Ceratitis capitata* Wiedemann	TEP, Dacinae B
€2		Red Palm Weevil, *Rhynchophorus ferrugineus* Olivier	DRY, Rhynchophorinae B

SINGAPORE **2019 May 8** (Diplomatic Relations with Israel)

1967-68	2x$1.30	Butterfly	Nymphalidae B

SLOVENIA **2020 September 25**

82c		Scarlet Lily Beetle, *Lilioceris lilii* Scopoli	CHR, Criocerinae B

SOUTH GEORGIA IS. & SOUTH SANDWICH IS. 2020 October 15

1p		*Eretmoptera murphyi* Schaeffer	Chironomidae, Orthocladiinae A

TRISTAN DA CUNHA **2020 November 9** (Migrant Species)

£1		Black Witch, *Ascalapha odorata* L.	NOC, Calpinae A

TURKEY **2020 Sepember 24**

3l		Seven-spotted Ladybird, *Coccinella septempunctata* L.	COC, Coccinellinae B

TUVALU **2020 November 11**

a	$1.50	Western Honeybee, *Apis mellifera* L.	API, Apinae A
b	$1.50	Ant	Formicidae A
c	$1.50	Dragonfly	Odonat A
d	$1.50	Grasshopper	Orthoptera A
e	$1.50	Monarch, *Danaus plexippus* L.	NYM, Danainae A
f	$1.50	Rhinoceros Beetle	SCA, Dynastinae A
a	$3	Tailed Jay, *Graphium agamemnon* L.	PAP, Papilioninae A
b	$2.50	Great Eggfly, *Hypolimnas bolina* L.	NYM, Nymphalinae A
c	$2	Like a	PAP, Papilioninae A

TUVALU (continued)

d	$1.50	Like b	NYM, Nymphalinae	A
e	$1	Like a	PAP, Papilioninae	A
f	50c	Like b	NYM, Nymphalinae	A
	$5.50	Brown Soldier, *Junonia hedonia* L.	NYM, Nymphalinae	A
	$7	Cicada	Cicadidae	A
Margin LL:		Western Honeybee, *Apis mellifera* L.	API, Apinae	Z
	M-Bottom:	Beetle	Chrysomelidae	Z

SURINAM **2019 December 27**

1577-92	16x$5	Various Insects & Butterflies in assorted margins		Z
1585	$5	Indian Leaf, *Kallima paralekta* Horsfield	NYM, Nymphalinae	A
591	$5	Painted Lady, *Vanessa cardui* L.	NYM, Nymphalinae	A
1592	$5	Lime Swallowtail, *Papilio demoleus* L	PAP, Papilioninae	A

SWEDEN **2020 January 9** (Greetings)

2852	(11k)	5 Western Honeybees, *Apis mellifera* L.	API, Apinae	C
2853	(11k)	3 Western Honeybees, *Apis mellifera* L.	API, Apinae	C
2854a	(11k)	2 Stylized Butterflies	Lepidoptera	C
2854b	(11k)	Insect	U/I	C
2854c	(11k)	Insect	U/I	C
2854e	(11k)	Stylized Butterfly	Lepidoptera	C

UZBEKISTAN **2020 July 17** (Children's Art)

905	3200-7300s.	*Danaus sp.*, In margins of s/t	NYM, Danainae	Z

VATICAN CITY **2020 February 14** (50th Anniversary of Earth Day)

1739	30c & €1.20.	Earth & water, s/t of 2		
	Margin UL:	Western Honeybee, *Apis mellifera* L.	API, Apinae	Z
	LL:	Stylized Butterfly	Lepidoptera	Z

BEYOND THE CATALOGS – Non-Catalog Listed Issues

GUINEA-BISSAU **2020 April 27** (Stamperija GB-200304a&b)

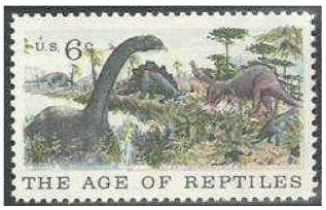
a	750fr	Painted Lady, *Vanessa cardui* L.	NYM, Nymphalinae	A
b	750fr	Peacock, *Nymphalis io* L.	NYM, Nymphalinae	A
c	750fr	Clouded Apollo, *Parnassius mnemosyne* L.	PAP, Parnassiinae	A
d	750fr	Common Blue, *Polyommatus icarus* Rottemburg	LYC, Polyommatinae	A
	3000fr	Orange Tip, *Anthocharis cardamines* L.	PIE, Pierinae	A
Margin:		Monarch, *Danaus plexippus* L.	NYM, Danainae	Z

ST. THOMAS & PRINCE IS. 2020 (Stamperija ST-200315a)

d 25d European Field Cricket, *Gryllus campestris* L., Jersey #1136 s-o-s GRY, Gryllinae A

TOGO **2019 June 25** (Stamperija TG-190247b10)

1000fr. Stylized caterpillar in bird's beak, Barbados #797 s-o-s Lepidoptera C



PALEONTOLOGY

Editor

Michael Kogan, BU1863

New Listings

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

Australia 2020 November 02 "Opalized Fossils"

Additional souvenir material of stamp set issued on August 17th 2020, issued in very limited quantity, called "Impressions" by Australian Post.

Serbia 2020 November 03 "125th anniversary of Natural History Museum in Belgrade"

Set of 4 stamps, printed in a sheet of 5 rows with 4 stamps + 1 tab (different tab at every row) in the middle. One of the tabs shows an Ammonite.

RSD40 (2nd column) - *Hypsodontus serbicum*

During a 1969 excavation in Prebreza, experts from the Natural History Museum found a fossilized skull of a hitherto unknown species of extinct antelope. The finding is extremely significant, this new species was found for the first time on the territory of Serbia. The specimens on the basis of which it is described are kept in the Natural History Museum. (From official press release).

---- Stamperija products ----

CHAD **2020 March 30** (Fossils) (M/S 4 & S/S 1) [*1]

800fr	†*Turritella terebralis*	†Turritellidae	A
800fr	†*Paradoxides davidis*	†Paradoxididae	A
800fr	†*Triceratops prorsus*	†Ceratopsidae	A
800fr	†*Tyrannosaurus rex*	†Tyrannosauridae	A
3300fr	†*Tyrannosaurus rex*	†Tyrannosauridae	A SS
	Margin: *Keichousaurus hui*	†Keichousauridae	B SS Z
	claw of †*Baryonyx walker*i	†Spinosauridae	B SS Z
	†*Geosternbergia sternbergi*	†Pteranodontidae	B SS Z

2020 August 20 (Extinct species) (M/S 4 & S/S 1) [*1]

800fr	†*Ectopistes migratorius*	Columbidae	A
800fr	†*Chelonoidis abingdonii*	Testudinidae	A
800fr	†*Mammuthus primigenius*	Elephantidae	A
800fr	†*Raphus cucullatus*	Columbidae	A
3300fr	†*Megaloceros giganteus*	Cervidae	A SS
	Margin: †*Arctodus simus*	Ursidae	B SS Z

CHAD (conitinued)

2020 August 20 (Prehistoric water animals) (M/S 4 & S/S 1) [*1]

800fr	†*Anomalocaris canadensis*	†Anomalocarididae	A
800fr	†*Archelon ischyros*	†Protostegidae	A
800fr	†*Shonisaurus popularis*	†Shonisauridae	A
800fr	†*Mosasaurus hoffmannii*	†Mosasauridae	A
3300fr	†*Carcharocles megalodon*	†Otodontidae	A SS
Margin:	†*Mosasaurus hoffmannii*	†Mosasauridae	B SS Z
	†*Shonisaurus popularis*	†Shonisauridae	B SS Z

GUINEA **2020 April 28** (Dinosaurs) (M/S 4 & S/S 1) [*1]

12500fr	†*Tyrannosaurus rex*	†Tyrannosauridae	A
12500fr	†*Parasaurolophus walkeri*	†Hadrosauridae	A
12500fr	†*Stegosaurus stenops*	†Stegosauridae	A
12500fr	†*Einiosaurus procurvicornis*	†Ceratopsidae	A
50000fr	†*Altirhinus kurzanovi*	Order: †Ornithischia	A SS
Margin:	†*Tyrannosaurus rex*	†Tyrannosauridae	B SS Z
	†*Stegosaurus stenops*	†Stegosauridae	B SS Z

GUINEA-BISSAU **2020 April 27** (Dinosaurs) (M/S 4 & S/S 1) [*1]

100fr	†*Triceratops horridus*	†Ceratopsidae	A
500fr	†*Spinosaurus aegyptiacus*	†Spinosauridae	A
750fr	†*Tyrannosaurus rex*	†Tyrannosauridae	A
1500fr	†*Triceratops horridus*	†Ceratopsidae	A
3000fr	†*Brachiosaurus altithorax*	†Brachiosauridae	A SS
Margin:	†*Majungasaurus crenatissimus*	†Abelisauridae	B SS Z
	†*Triceratops horridus*	†Ceratopsidae	B SS Z

MOZAMBIQUE **2020 April 15** (Dinosaurs) (M/S 4 & S/S 1) [*1]

90.50MT	†*Triceratops horridus*	†Ceratopsidae	A
90.50MT	†*Lambeosaurus lambei*	†Hadrosauridae	A
90.50MT	†*Deinonychus antirrhopus*	†Dromaeosauridae	A
90.50MT	†*Spinosaurus aegyptiacus*	†Spinosauridae	A
362MT	†*Carnotaurus sastrei*	†Abelisauridae	A SS
Margin:	†*Deinonychus antirrhopus*	†Dromaeosauridae	B SS Z
	†*Spinosaurus aegyptiacus*	†Spinosauridae	B SS Z

2020 September 15 (Prehistoric water animals) (M/S 4 & S/S 1) [*1]

100MT	†*Kronosaurus queenslandicus*	†Pliosauridae	A
100MT	†*Carcharocles megalodon*	†Otodontidae	A
100MT	Ammonite	Subclass: Ammonoidea	A
100MT	†*Mosasaurus hoffmannii*	†Mosasauridae	A
400MT	†*Dinichthys terrelli*	†Dinichthyidae	A
Margin:	†*Basilosaurus cetoides*	†Basilosauridae	B SS Z

NIGER **2020 June 06** (Dinosaurs) (M/S 4 & S/S 1) [*1]M/S

800fr	†*Stegosaurus stenops*	†Stegosauridae	A
800fr	†*Oviraptor philoceratops*	†Oviraptoridae	A

NIGER (continued)

800fr	†*Pterodactylus antiquus*	†Pterodactylidae	A
	†*Triceratops horridus*	†Ceratopsidae	A
800fr	†*Brontosaurus excelsus*	†Diplodocidae	A
3300fr	†*Spinosaurus aegyptiacus*	†Spinosauridae	A SS Z
	Margin: †*Tyrannosaurus rex*	†Tyrannosauridae	B SS Z
	†*Pterodactylus antiquus*	†Pterodactylidae	B SS Z

2020 June 10 (Extinct species) [*1]

The same stamps issued in individual Mini-Sheets of 3, Mini-Sheet of all 3 stamps

1000fr	†*Mammuthus primigenius*	Elephantidae	A
1000fr	†*Thylacinus cynocephalus*	†Thylacinidae	A
1000fr	†*Smilodon populator*	Felidae	A
	Margin: †*Equus simplicidens*	Equidae	B MS Z

SÃO TOMÉ AND PRÍNCIPE **2020 April 10** (Prehistoric water animals) (M/S 2 & S/S 1) [*1]

M/S of two stamps and two tabs

31.00d	†*Kronosaurus queenslandicus*	†Pliosauridae	A
31,00d	†*Xiphactinus*	†Ichthyodectidae	A
124,00d	†*Ichthyosaurus communis*	†Ichthyosauridae	A
	Margin: †*Kronosaurus queenslandicus*	†Pliosauridae	B SS Z

2020 May 31 (Fossils) (M/S 4 & S/S 1) [*1]

31.00d	†*Armigatus brevissimus*	Order †Ellimmichthyiformes	A
31.00d	†*Perisphinctes virguloides*	†Perisphinctidae	A
31.00d	†*Seymouria baylorensis*	†Seymouriidae	A
31.00d	†*Elrathia kingii*	†Alokistocaridae	A

The same stamps issued in individual Mini-Sheets of 6 stamps too

124.00d	†P*aradoxides gracilis*	†Paradoxididae	A SS
	Margin: †*Priscacara serrata*	Percidae	B SS Z
	Ammonite	Subclass: Ammonoidea	B SS Z

2020 June 08 (Dinosaurs) (M/S 4 & S/S 1) [*1]M/S

31.00d	†*Stegosaurus stenops*	†Stegosauridae	A
31.00d	†*Spinosaurus aegyptiacus*	†Spinosauridae	A
31.00d	†*Ankylosaurus magniventris*	†Ankylosauridae	A
31.00d	†*Parasaurolophus walkeri*	†Hadrosauridae	A

The same stamps issued in individual Mini-Sheets of 6 stamps too

124,00d	†*Velociraptor mongoliensis*	†Dromaeosauridae	A
	Margin: †*Triceratops horridus*	†Ceratopsidae	B SS Z
	†*Pterodactylus antiquus*	†Pterodactylidae	B SS Z
	†*Apatosaurus ajax*	†Diplodocidae	B SS Z

SIERRA LEONE **2020 March 27** (Prehistoric water animals) (M/S 3 & S/S 1) [*1]

The same stamps issued in sheets of 6, three S/S of 1 stamp each and one M/S of all 3 stamps

15800Le	†*Tylosaurus proriger*	†Mosasauridae	A
15800Le	†*Dinichthys terrelli*	†Dinichthyidae	A
15800Le	†*Leedsichthys problematicus*	†Pachycormidae	A

SIERRA LEONE (continued)

2020 March 27 (Fossils) (M/S 4 & S/S 1) [*1]

12500Le	†*Archaeopteryx lithographica*	†Archaeopterygidae	A
12500Le	†*Lycoptera davidi*	Lycopteridae	B
	†*Zhenyuanlong suni*	†Dromaeosauridae	A
12500Le	†*Kainops invius*	†Phacopidae	A
50000Le	†P*terodactylus antiquus*	†Pterodactylidae	A
	†*Perisphinctes virguloides*	†Perisphinctidae	A
	Margin: Ammonite	Subclass: Ammonoidea	B SS Z
	†*Keichousaurus hui*	†Keichousauridae	B SS Z

2020 June 12 (Prehistoric humans) (M/S 10) [*1]

5000Le	top row of 5 stamps of †*Homo neanderthalensis*	Hominidae	A
5000Le	bottom row of 5 stamps of †*Australopithecus africanus*	Hominidae	A

2020 June 12 (Dinosaurs) (M/S 10) [*1]

5000Le	†*Tyrannosaurus rex*	†Tyrannosauridae	A
5000Le	†*Spinosaurus aegyptiacus*	†Spinosauridae	A
5000Le	†*Ankylosaurus magniventris*	†Ankylosauridae	A
5000Le	†*Triceratops horridus*	†Ceratopsidae	A
5000Le	†*Tarbosaurus bataar*	†Tyrannosauridae	A
5000Le	†*Carnotaurus sastrei*	†Abelisauridae	A
5000Le	†*Tuojiangosaurus multispinus*	†Stegosauridae	A
5000Le	†*Carcharodontosaurus saharicus*	†Carcharodontosauridae	A
5000Le	†*Parasaurolophus walkeri*	†Hadrosauridae	A

2020 June 12 (Carolina Butcher) (M/S 4 & S/S 1) [*1]

(extinct genus of crocodylomorph suchian from the Late Triassic of North America)

14500Le x4	†*Carnufex carolinensis*	Class: Reptilia	A
50000Le	†*Carnufex carolinensis*	Class: Reptilia	A

2020 June 12 (200th anniversary of launch of the HMS Beagle) (M/S4 & S/S1) [*1]

2500Le	HMS Beagle and finch		
12500Le	Charles Darwin and HMS Beagle		
12500Le	Charles Darwin with tree of life		
12500Le	HMS Beagle		
50000Le	Charles Darwin and HMS Beagle		
	Margin: Charles Darwin and HMS Beagle		

2020 June 19 (Charles Darwin (1809-1882)) (M/S 4 & S/S 1) [*1]

14500Le	Charles Darwin with †*Velociraptor mongoliensis*	†Dromaeosauridae	B
14500Le	Charles Darwin with †*Stegosaurus stenops*	†Stegosauridae	B
14500Le	Charles Darwin with †*Citipati osmolskae*	†Oviraptoridae	B
14500Le	Charles Darwin with †*Parasaurolophus walkeri*	†Hadrosauridae	B
58000Le	Charles Darwin with †*Pteranodon longiceps*	†Pteranodontidae	B
	Margin: *Elasmosaurus platyurus*	†Elasmosauridae	B SS Z

TOGO **2020 May 29** (Dinosaurs) (M/S 4 & S/S 1) [*1]

800fr	†*Brachiosaurus altithorax*	†Brachiosauridae	A
800fr	†Stegosaurus stenops	†Stegosauridae	A

TOGO (continued)

800fr	†*Altirhinus kurzanov*	Order: †Ornithischia	A
800fr	†*Pachycephalosaurus wyomingensis*	†Pachycephalosaurida	A
3300fr	†*Triceratops horridus*	†Ceratopsidae	A
	Margin: †*Dilophosaurus wetherilli*	†Dilophosauridae	B SS Z

2020 May 29 (Fossils) (M/S 4 & S/S 1) [*1]

800fr	†*Coelophysis bauri*	†Coelophysidae	A
800fr	†*Elrathia kingii*	†Alokistocaridae	A
800fr	†P*arkinsonia parkinsoni*	†Parkinsoniidae	A
	†*Keichousaurus hui*	†Keichousauridae	A
800fr	†*Carcharocles megalodon* tooth	†Otodontidae	A
3300fr	†*Seymouria baylorensis*	†Seymouriidae	A
	Margin: †*Lycoptera davidi*	Lycopteridae	B SS Z
	†*Tyrannosaurus rex*	†Tyrannosauridae	B SS Z
	†*Dicranurus monstrosus*	†Odontopleuridae	B SS Z

Stamps of private post companies

Nothing to report this time

Personalized stamps

Germany August-September 2020, **"Treasures of German Palaeontologic Museums"**

Five personalized stamps produced by private post company "Brief und mehr" who operate in Muenster region.

First set of 3 stamps is dedicated to Paleontologic Museum of Munich. Fossilized skeletons of three animals shown on these stamps: Gomphotherium (prehistoric elephant) Plateosaurus dinosaur and the reptile Prestosuchus chiniquensis from Triassic Period.

Another set, of two stamp, shows a reconstruction of the dinosaurs Lilienternus and Plateosaurus dinosaurs from an exhibit at the Natural History Museum of Stuttgart.

Other stamps to consider

Croatia 2020 October 22 "Minerals & Rocks 2020" (M/S 2)

5.00HK (on the right side of the Mini-Sheet) Lithothamnium Limestone

The Mini-Sheet "Minerals & Rocks 2020" contains two stamps: The Hraschina Meteorite and Lithothamnium limestone (on the right side of the Mini-Sheet).

Lithothamnium limestone, called “litavac” for short in Croatian, is a sedimentary rock. This massive, porous type of limestone is mostly composed of red algae of the Lithothamnium order that inhabited the Paratethys Sea 15 million years ago, in Middle Miocene. The limestone’s name is derived from the algae, in addition to which it contains the remains of bivalves, echinoderms, bryozoans and benthic foraminifera. Apart from the remains of sea organisms, Lithothamnium limestone contains fragments of quartz and calcite, mica flakes and fragments of rocks from the coastal area. Lithothamnium limestone was formed in the shallows of the Pannonian Sea, which surrounded Medvednica and other Pannonian Croatia mountains, which were islands at the time.

Along with Triassic dolomites, Lithothamnium limestone forms a unique karst zone on the west side of Mount Medvednica. Even though karst phenomena on Mount Medvednica are mostly hidden under younger Holocene deposits, many karst forms such as caves, pits, sinkholes and karst valleys are still present in this zone.

Postmarks

China 2020 July 19 “Lantian Man”

Lantian Man, formerly *Sinanthropus lantianensis* (currently *Homo erectus lantianensis*) is a subspecies of Homo erectus. Discovered in 1963, in Lantian County, in China's Shaanxi province, approximately 50 km southeast of Xi'an. Described by J. K. Woo in the following year.

Other postmarks to consider

Nothing to report this time

Future issues

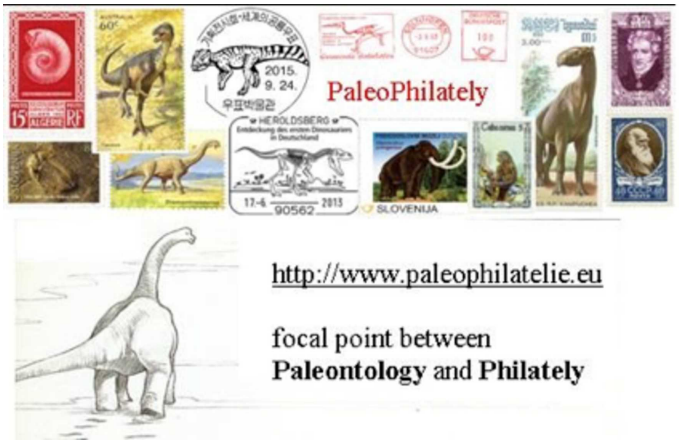
Nothing known on the moment

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.

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

Images and description of all stamps mentioned above can be seen on the following website: http://www.paleophilatelie.eu/year/current.html



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

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

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

Contact: admin@paleophilatelie.eu

Join us on Facebook: PaleoPhilately group

BIOLOGY REFERENCE WEBSITES

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

STAMP ISSUES

Catawiki. Listings and illustrations of stamps for sale by topic for every theme from A to Z. *http://www.catawiki.com/catalog/stamps/100283-themes-topics*

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

Delcampe. Worldwide listings and illustrations of stamps for sale. They have revised their website to make it more user-friendly. *http://www.delcampe.net/en_GB/marketplace/stamps/*

eBay. Worldwide listings and illustrations of stamps, covers, postcards, and other collectibles for sale. *http://www.ebay.com/*

IGPC. Formerly Cyber Stamps. On-line postage stamp catalogue of worldwide topical issues. *https://www.igpc.com/*

Neofila. Modern issues from Russia, Eastern Europe, and Baltic States. Also includes some African countries. *http://www.neofila.com/*

Stamp Collection. On-line postage stamp catalogue of worldwide issues. Includes production information. *http://colnect.com/en/stamps/countries*

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

Stamp World. Listings and illustrations of issues from all countries by year. Includes production information. Requires free registration and login. *http://www.stampworld.com/en/maps/Europe/*

Virtual Stamp Club. Latest news from the world of stamp collecting. Links to other stamp collecting sites and the websites of almost every other collector society or major club. *http://www.virtualstampclub.com/*

Zillions of Stamps. Worldwide listings and illustrations of stamps for sale. 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
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
AES Aeshnidae
ANT Anthicidae
BEL Belostomatidae
BRAC Braconidae
CAN Cantharidae
CER Cerambycidae
CIC Cicadellidae
COE Coenagrionidae
CORE Coreidae
CRAM Crambidae
DER Dermestidae
ELA Elateridae
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
AND Andrenidae
API Apidae
BLA Blattidae
BUP Buprestidae
CAR Carabidae
CHR Chrysomelidae
CICA Cicadidae
COR Corydalidae
COS Cosmopterigidae
CUL Culicidae
DRO Drosophilidae
FOR Formicidae
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

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AUTHORS

BIOLOGY UNIT of the AMERICAN TOPICAL ASSOCIATION

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Canadian members please note: It costs us $20 to cash a cheque drawn on a Canadian bank. Please remit funds drawn on a U.S. bank, or use a credit card or PayPal.

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