BIOPHILATELY

OFFICIAL JOURNAL OF THE BIOLOGY UNIT OF ATA MARCH 2021 VOLUME 70 NUMBER 1

Slime Molds: Plant or Animal? Neither.

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





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

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BIOPHILATELY

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

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

FROM THE INTERIM EDITOR'S DESK

Chris Dahle, BU 1269

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

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

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

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

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

DUES RATES (US\$)

US membership \$25 Canada membership \$30 Worldwide membership \$45

ADVERTISING RATES

Full page insertion \$20 Half page insertion \$10 Quarter page insertion \$5

On-line membership \$15

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

PRESIDENT'S MESSAGE

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

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

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

Stay safe, stay warm and wear those masks

SECRETARY'S CORNER

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

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

Renew Your Membership

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

New member

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



NEWS OF NOTE

CALL FOR A NEW BUTTERFLY & MOTH CHECKLIST

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

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

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

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

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

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

The Great American Stamp Show, August 12-15 2021

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

Planning and Hoping

We have been communicating with local officials and Convention Center staff to prepare as best we can. Several spring events at the Stephens Center are being rebooked for later in the summer and fall. Officially, Convention Center staff "hope to be operational by the summer." The reality is the Great American Stamp Show lands in the gray area between continued restrictions and some return to normalcy. The APS, ATA, and AFDCS have been planning in earnest.

The World Series of Philately landscape has shifted to schedule for the second half of the year. A few shows typically held in the spring have announced or are looking to firm up a show in August or later. Unfortunately, others will cancel or be limited to bourse only for 2021, with plans of coming back with a full exhibition in 2022.

Not Your Average Stamp Show

For those who have attended a Great American Stamp Show in years past, you know, this is not your average stamp show. It is the most significant national show every year. We have a responsibility for the show to be financially viable for dealers and the APS. To accomplish that, we must draw 130 dealers, 3,000 or more visitors, and maintain whatever health and safety restrictions required to operate the show. Even in a usual year, this is no small undertaking, but it will be a challenge with the pandemic's everchanging world.

We hope to bring all the events that make our stamp shows memorable for collectors and non-collectors alike. But if we're able to proceed, we are already anticipating changes to certain functions, particularly the dinners and seminars where close spacing may not be allowed.

To be able to meet the needs of the show, there is a decision point. In this case, we will make a firm decision by the end of March based on the best available information and guidance from folks in Illinois.

Slime Molds: Is this a First?

By Christopher Dahle BU 1269

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

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



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



Figure 2: Lycogala epidendrum Scott #811f

nuclear division to form a multinucleate plasmodium. Under adverse conditions they form macrocysts in a structure called a sclerotium.

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

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

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



Figure 4: Cribraria purpurea on Belarus Scott #1174.

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

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

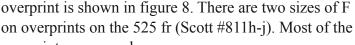
(Figure 5 Scott #1175).



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

Comoro Islands Scott #811f was issued in a miniature sheet of 9 (Figure 1) and

a souvenir sheet of three Scott # 8111 (fFtigure 6). Scott 811 was overprinted and surcharged to 200 fr (Scott #826Fi) in 1997-98 Figure 7. Detail of the



overprints were used locally and few mint copies are available.



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

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



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

Belarus Scott#1173-75 (Figure 9) were designed by Marina Yurchik from photographs by Yevgeniy Moroz. They are

printed on chalk-surfaced gummed paper in sheets of 6 stamps. 36,000 of each duty were printed by multicolor offset by Republican Unitary Enterprise "Bobruisk **Integrated Printing House** named after A.T.Nepogodin". Figure 10: Security The stamps have an invisible marks shown in security mark (Figure 10).



white are present on the stamps from Belarus.



Figure 3: Arcyria globosa on Belarus Scott #1173.



Figure 5: Physarum album on Belarus Scott #1175.

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

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



Figure 12: Souvenir sheet Belarus Scott # 1175a.



K.Novozhilov, Doctor of Biological Sciences."

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

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

Slime mold research has resulted in their use for modeling other biological and non-biological processes. Slime molds have been tested for

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

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

http://www.myxomycetes.net/Myxomycete Beauty/

References: Accessed January 16-17, 2021

General

https://herbarium.usu.edu/fun-with-fungi/slime-molds

https://ucmp.berkeley.edu/protista/slimemolds.html

https://plantclinic.tamu.edu/factsheets/slime-mold/

https://royalsocietypublishing.org/doi/10.1098/rstb.2018.0368

 $http://bioweb.uwlax.edu/bio203/2010/renner_brad/classification.htm$

http://myxomycetes.net/Species-galleries-A-C/section-1/Arcyria_globosa/

http://www.myxomycetes.net/On Myxomycetes/

https://www.discoverlife.org/mp/20q

https://ucmp.berkeley.edu/protista/slimemolds.html

https://www.fungusfactfriday.com/053-slime-molds/

http://www.botany.hawaii.edu/faculty/wong/Bot201/Myxomycota/Myxomycota.htm

https://botanyphoto.botanicalgarden.ubc.ca/2012/08/lycogala-epidendrum/

Stamps

http://www.comores-online.com/collections/philatelie/

https://belpost.by/en/philately/infolists/3054

Research

https://www.nasa.gov/feature/goddard/2020/slime-mold-simulations-used-to-map-dark-matter-holding-universe-together

https://www.kqed.org/science/635319/this-pulsating-slime-mold-comes-in-peace

Species Descriptions

Lycogala

https://www.discoverlife.org/mp/20q?search=Lycogala+epidendrum

https://www.messiah.edu/Oakes/fungi_on_wood//puffball%20and%20cushion/species%20pages/

Lycogala%20epidendrum.htm

Arcyria

https://www.bcrc.firdi.org.tw/fungi/fungal_detail.jsp?id=FU200802090016

Cribraria

https://www.discoverlife.org/mp/20q?search=Cribraria+purpurea

https://www.mycoquebec.org/bas.php?

trie=C&l=l&nom=Cribraria%20purpurea%20/%20Cribaire%20pourprée&tag=cribraria%20purpurea&gr o=73

Physarum

http://www.hiddenforest.co.nz/slime/family/physaraceae/physa06.htm

Fossil Amphibia on Stamps

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

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

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

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

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

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

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

Table 1: Prehistoric Amphibians on stamps

Country	Date	Denomination	Scott Catalogue #	Description
Australia	9-04-1997	45c	1615	Paracyclotosaurus
Australia	9-24-2013	60c	3986, 3992	Koolasuchus
People's Republic of Benin	8-30-1996	100fr	887	Eryops
Brazil	1012-2014	1.30r	3285a	Prionosuchus plummeri
Cambodia (Kampuchea)	3-20-1986	80c	665	Mastodonsaurus
Central African Republic	12-15-2015	900fr		Fossil frog
People's Republic of Congo	8-20-1993	75fr	1043	Ichthyostega
Czechoslovakia	8-08-1968	60h	1560	Paleobatrachus grandipes (Giebel)

Table 1 Continued:

8-15-2006 12-20-2000	\$1.50	1106	Platymantis megabotoniviti*
12-20-2000			Imagahataniiitia
12-20-2000	= 0.0 (1011	
1	500fr	1011	Acanthostega
12-20-2000	260fr	1017c	Acanthostega
12-20-2000	260fr	1017h	Pholidogaster
12-20-2000	260fr	1017i	Gerrothorax
12-20-2000	260fr	1017j	Diplocaulus
2-06-1995	2d	1605k	Giantoperis
8-01-1999	3d	2140j	Cacops
8-01-1999	3d	2140k	Ichthyostega
10-24-1978	35pf	1961	Paleobatrachus
	'		diluvianus
			(Wiederau)
5-24-2008	20.50k	522	Icthyostega
			stensioei
4-15-1997	\$1.50	1914f	Platyhystrix
	ľ		
11-12-2018	640fr		Seymouria
3-10-1993	\$30	2662j	Cacops
10-15-2001	\$100	3667a	Ichthyostega
10-15-2001	\$100	3667b	Eryops
10-15-2001	\$100	3667f	Eogyrinus
3-04-2020	200f	4545a	Hungarobatrachus
0 0 1 2020	2001	10100	Trangarobatiaonao
11-22-1999	\$10		Acanthostega
11-22-1999	\$10		Cacops
3-01-1985	150d	1245	Fossil frog
4-30-2012	66m	2591a	Ichthyostega
4-30-2012	16m	2629e	Peltobatrachus pustulatus
6-15-2018	116m		Diplocaulus
	12-20-2000 12-20-2000 2-06-1995 8-01-1999 8-01-1999 10-24-1978 5-24-2008 4-15-1997 11-12-2018 3-10-1993 10-15-2001 10-15-2001 10-15-2001 3-04-2020 11-22-1999 11-22-1999 3-01-1985 4-30-2012	12-20-2000 260fr 12-20-2000 260fr 2-06-1995 2d 8-01-1999 3d 8-01-1999 3d 10-24-1978 35pf 5-24-2008 20.50k 4-15-1997 \$1.50 11-12-2018 640fr 3-10-1993 \$30 10-15-2001 \$100 10-15-2001 \$100 3-04-2020 200f 11-22-1999 \$10 3-01-1985 150d 4-30-2012 66m 4-30-2012 16m	12-20-2000 260fr 1017i 12-20-2000 260fr 1017j 2-06-1995 2d 1605k 8-01-1999 3d 2140j 8-01-1999 3d 2140k 10-24-1978 35pf 1961 5-24-2008 20.50k 522 4-15-1997 \$1.50 1914f 11-12-2018 640fr 3-10-1993 \$30 2662j 10-15-2001 \$100 3667a 10-15-2001 \$100 3667b 10-15-2001 \$100 3667f 3-04-2020 200f 4545a 11-22-1999 \$10 11-22-1999 \$10 3-01-1985 150d 1245 4-30-2012 66m 2591a 4-30-2012 16m 2629e

Table 1 Conntinued:

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

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

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

Table 2 – Other Philatelic Materials

Country	Year	Туре	Description
Australia	1997	Maxi Card	Official maxi-cards were released for entire set showing fossils of the species.
Australia	2013	Maxi Cards	Official Maxi-cards were released for all issues in set – showing reconstructions of animals.
Benin	1996	Postmark	A special postmark for the first day issue for issues 884-889. Shows a stylized reconstruction of a Tetrapodomorph – likely <i>Crassigyrinus</i> .
Cenetral African Republic	12-03- 1993	Margin of Souvenir Sheet	Bottom margin of Souvenir sheet (Scott 1020) shows a <i>Mastodonsaurus</i> .
Chad	3-27- 2013	Margin of Souvenir Sheet	The 2017 issue of dimorphodon has a small Diplocaulus in the lower right corner of the souvenir sheet margin.
People's Republic of China	2003	Postal Card	Postal Card exhibits image of fossil frog.
People's Republic of China	2007	Postal Card	Exhibits image of fossil <i>Callobatrachus</i> sanyensis.
Germany	2002	Postmark	Postmark showing <i>Diadectes absitus</i> in honor of the Department of Geosciences and Geography at Goethe Universität in Frankfurt am Main. Note <i>Diadectes absitus</i> is now referred to as <i>Silvadectes absitus</i> .
Greenland	2008	1	Greenland Post issued official maxi-cards and FDC showing <i>Ichthyostega</i> for the 2008 issue of 521-523. Postmark shows a reconstruction of the skull of <i>Ichthyostega</i> .
Greenland	2009	Postmark	The 2008 postmark was updated for the 2009 fossils of Greenland issues (533-535).
Guinea	11-01- 1997	Margin of Souvenir Sheet	Scott Catalog #1048 <i>Dimetrodon</i> , shows an <i>Eryops</i> in lower left margin of souvenir sheet.
Guinea	5-07- 1988	Margin of Souvenir Sheet	Margin shows individuals of <i>Cacops</i> and <i>Ichthyostega</i> in lower left of sheet.
Guinea		Margin of Souvenir Sheet, overprinted with surcharge.	Margin shows individuals of <i>Cacops</i> and <i>Ichthyostega</i> in lower left of sheet. Note this is a reprint/overprinted version of the 1998 issue. Overprint reads 200th anniversary of Charles Darwin.
Guinea-Bissau		Margin of Souvenir Sheet	Margin of souvenir sheet exhibits an <i>Eryops</i> .

Table 2 Continued:

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

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

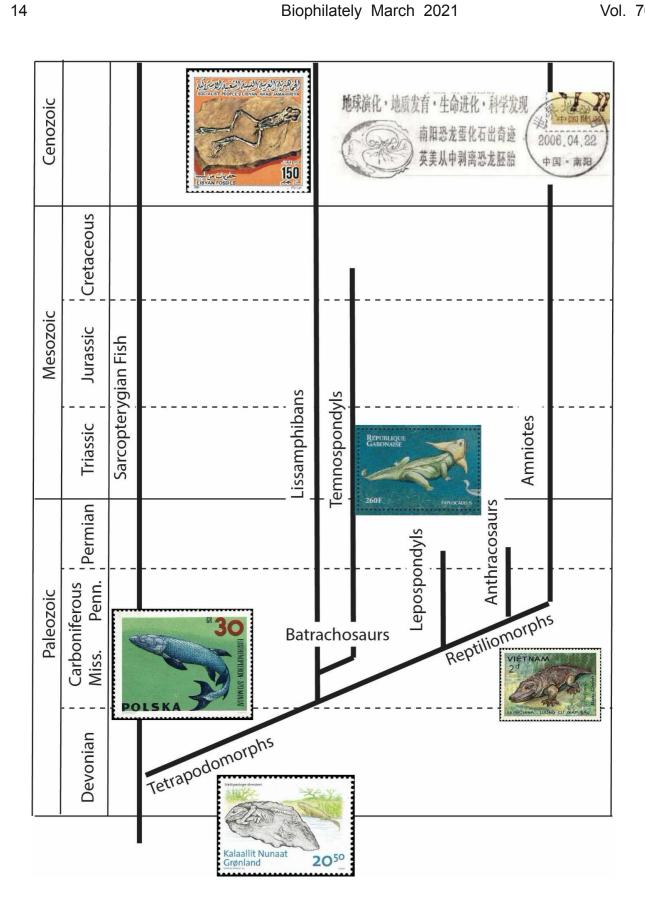


Figure 2: A selection of Stamps exhibiting fossil amphibians. Under each stamp is the country of origin and the Scott Catalogue number for that issue. Scans courtesy of Michael Kogan's paleophilatelie.eu.



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

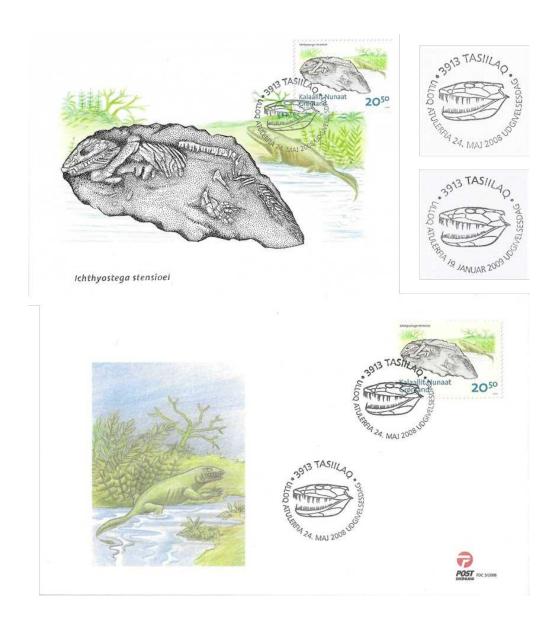
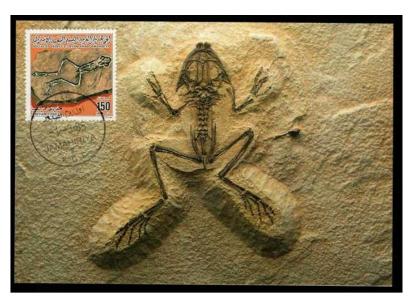
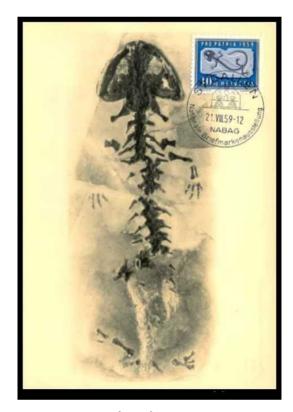


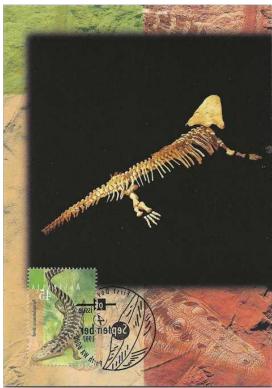
Figure 4: Special Maxi-cards showing fossil amphibians. The Libya 1985 Maxi-card is courtesy of Bob Nowakowski. The Switzerland 1959 Maxi-card is courtesy of Michael Kogan. The Australia 1997 Maxi-card is from the author's collection.



Libya, 1985







Australia, 1997

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

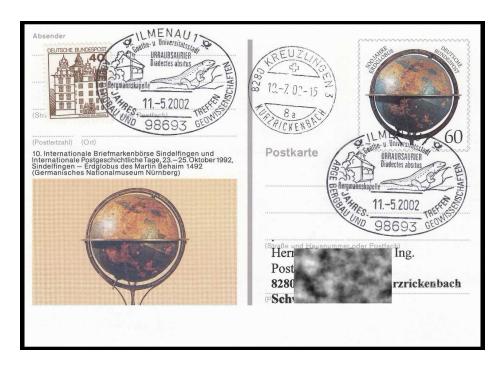


Figure 6: Postmark for the Benin 1996 First Day Ceremony, courtesy of Michael Kogan's paleophilatelie.eu.



Acknowledgements:

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

Selected References:

Anonymous, 2008, Greenland Collector, N.2 issue

[has a discussion of the 2008 Prehistoric Life issues – English version available here: http://www.paleophilatelie.eu/images/details/stamps/official/greenland/2008/GC_GB_0802.pdf]

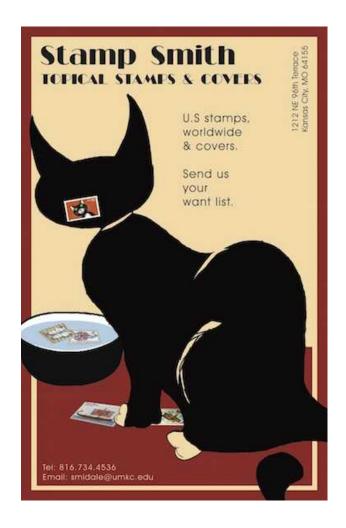
Benton, M.J. (Ed.) 2020. Cowen's History of Life, 6th Edition, Wiley-Blackwell, 400 p.

Eichler, V. 2017. Amphibians on Postage Stamps – A thematic coverage and checklist, American Topical Association Handbook 165, 97 p. (the digital version has excel and pdf spreadsheets that do list several prehistoric amphibians as well as several more recently extinct species. The text also has a very nice treatment of modern amphibians.).

Ernst, H.-U. 2015. Fossil-Darstellungen von Fröschen in der Philatelie, Glückauf, v. 126, p. 72-75 [has discussion of several issues showing frogs including the Chinese Postal cards from 2003 and 2007]

Michael Kogan's Paleophilatelie page, http://www.paleophilatelie.eu/

Stanley, S.M. and Luczaj, J.A. 2014, Earth System History, 4th edition, W.H. Freeman Press, 624 p. Ton Van Eijden's Stampedout.nl webpage



MAGNIFICENT BUTTERFLY: Papilio homerus

Vladimir Kachan, Belarus

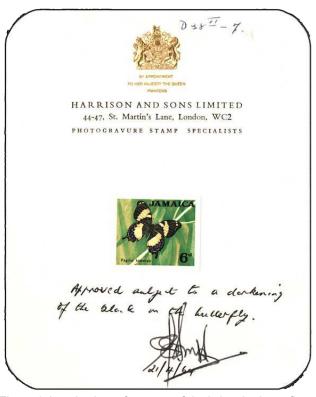
Butterflies are airy and flying flowers on Earth. Their beauty is so stunning and inspiring that the love and admiration for them in some people gives rise to the desire to preserve this tenderness and lightness for a long time.

In the largest remaining stretch of tropical forest, deep in the hills of Jamaica, flies a giant among butterflies, the rare and endangered the Jamaican Giant Swallowtail (Figure 1). Threatened mostly by habitat loss through bauxite mining, this majestic butterfly has become the delicate ambassador of this still pristine habitat. As the largest species of the genus Papilio in the world and the largest butterfly in the Western Hemisphere, this rare butterfly once inhabited most of Jamaica (Figures 2, 3, 4, 5, 6, 7) but has now dwindled into only two tiny populations: an



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

eastern population, found where the Blue Mountains and John Crow Mountains merge, and a western population in Cockpit



Country. It is the largest of Figure 1 Jamaica imperforate proof depicting the butterfly the true swallowtail species Papilio homerus and approved on April 21, 1964

in the Americas with wingspan up to 15 centimeters and arguably one of the most spectacular butterflies in all of the world. The Jamaican Giant



with shift blue color on the right hindwing wing of butterfly Papilio homerus - variety



Figure 3 Jamaica 1964 Figure 4 Jamaica 1964 Figure 5 Jamaica with blue omitted from 1964 with overprint hindwings of butterfly Papilio homerus - error ROYAL VISIT (Scott #223a)



on March 3, 1966 **MARCH 1966** (Scott #249)



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



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

Swallowtail is a colourful butterfly (Figure 8), with bold and distinctive broad yellow bands on a black background, large tails, and hindwings trimmed with iridescent blue scaling. The Jamaican Giant Swallowtail butterfly is endemic to the island of Jamaica. Historically, it has been recorded from seven of Jamaica's fourteen parishes.

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



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

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

According to historical information, recounting the circumstances of its original description, this magnificent *Papilio* was among the number of rarities of the insect race which Fabricius met with in the Entomological Cabinets of the

English Naturalists. Fabricius' description account is, however, based on a painting, and not directly on a specimen. Fabricius saw the drawing of this insect in the Collection of Paintings formed by the ingenious hand of the indefatigable and liberal naturalist William Jones, and was so delighted with its grandeur that he determined to define the species by an appellation more than usually superlative (Figure 10).



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

But where did Jones get access to the specimen of the Jamaican Giant Swallowtail that he painted and who collected it? The English captured Jamaica in 1655. The original material of *Papilio homerus* was probably collected by English explorers and brought



Figure 9 Jamaica 1975 butterflies miniature sheet mock-up

to Britain sometime after 1734. Painting of William Jones images of *Papilio homerus* was made 1783–1785. It was also indicated

Jamaica as its origin, noting as very rare species (Figure 11).

Since its description by Fabricius in 1793, *Papilio homerus* has been a highly prized butterfly. The Giant Swallowtail is representative of a unique tropical group of



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

swallowtail butterflies and is found nowhere else in the world except Jamaica (Figure 12). *Papilio homerus* is the largest species in the genus with a forewing length that averages 75 mm, and some reported female specimens have a forewing length of 90 mm. The sexes of *Papilio homerus* are similar in coloration and pattern and the females are larger in size. The dorsal surface of the forewing and hindwing has a base color of dark brown to blackish with a broad, yellow discal band extending

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

across both wings (Figure 13). Adult Jamaican swallowtails can soar at high

unmatched by any other New World

butterfly species (Figure 14, Figure 15). It adds a source of richness to the human

observer's experience

in Jamaica, and can

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

Like virtually all butterflies, the Giant Swallowtail helps to pollinate flowers in the adult stage, helps recycle minerals in vegetation in the larval stage, and provides a food source to numerous insectivorous birds and mammals as well as many other rain forest inhabitants.

Aesthetically, its majestic beauty and majestic flight is virtually

Butterflies of JAMAICA

| Jumaica 5 | Jamaica 5 | Jamaica 5 |
| PAPILIONIDAE

Figure 14 Jamaica 1975 butterflies miniature sheet essay

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



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

serve as a powerful symbol of Jamaica's autonomy, the Jamaican lover of nature and the environment, and the extensive protected area system in Jamaica.

In its endemic Jamaica, the butterfly simultaneously serves as an icon of national pride and a need for

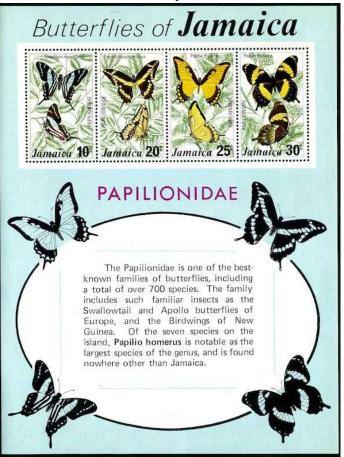


Figure 15 Miniature sheet of Jamaica with butterfly *Papilio homerus* issued on August 25, 1975 (Scott #401a)



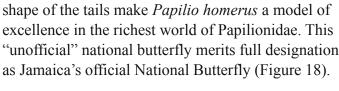
Figure 16 Set stamps of Jamaica with butterfly Papilio homerus issued on August 18, 1994 (Scott #810-13)

destruction and recent mining initiatives. In addition, the extant populations of Papilio homerus (Figure 17) reside in areas of Jamaica famous for their difficult terrain, which further confounds the ability to perform the long-term field studies necessary for understanding the biology and population dynamics for this species.

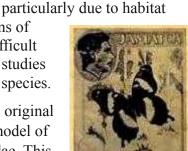


Figure 18 Stamp of Jamaica with butterfly Papilio homerus issued on October 28, 2016

The smooth outlines of the butterfly and the original



"unofficial" national butterfly merits full designation The Author is ready to help for philatelists in creating Phillip Hart in 1952



under CITES Appendix 1 and

The range of this enigmatic butterfly, possibly less than 10

the Jamaican Wildlife Protection Act of 1945

continues to dwindle,

(amended 1988).

Figure 17 Proposed butterfly Papilio homerus design by

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

Fl A

Proteaceae



5212 \$1.10 Silver banksia, *Banksia marginata*

BOTANY

Editor

Christopher E. Dahle BU 1269



*********		•	******	TAMAS
Coattle Danson	Common Nama/Co	New Listings	Family/Calafamil	Cada
Scott# Denom ALBANIA	Common Name/Sc		Family/Subfamily	
	Sheet of 2	20 February 10 (Liberation of Alba	ma /3y) - 33	5/ 2
3038			Domessanoooo	ELA CC
3038a 2501	Poppies, Papaver rhoea		Papaveraceae	Fl A SS
ALGERIA	20	18 October 16 (Honeycombs and flo	owers) Se	et/2
1765 25d	Eucalyptus blossoms, Eu	ucalyptus sp.	Myrtaceae	Fl B
1766 25d	Jujube bossoms, Ziziphus	s jujuba	Rhamnaceae	Fl B
	20	119 May 11 (Protected Species) S	heet/2	
1786	Unidentified tree		,	T B U MS Z
ANDORRA (French) 20	20 October 2 Single		
`	White fir, <i>Abies alba</i>		Pinaceae	ТА
	ŕ	00 X X 0 C: 1	11100000	
ANDORRA (• /	Single Single	3.6.1	T1 X7 A
480 €1.45	Linden leaf and flower	r, Tilia cordata	Malvaceae	Fl V A
ANTIGUA	20	119 June 11 (Beans) Sheet/6		
3557a \$3.00	Vanilla bean and flower,	Vanilla planifolia	Orchidaceae	Fl Fr A MS
3557c \$4.00	Cocoa bean, Theobroma	a cacao	Malvaceae	Fr A MS
3557e \$5.00	Coffee beans, Coffee an	rabica	Rubiaceae	Fr A MS
	20	119 June 11 (Beaches) Sheet/6		
3560a \$2.00	Darkwood Beach, Co	ocos nucifera	Arecaceae	T B MS
3560c \$4.00	Galley Bay Beach, Co	ocos nucifera	Arecaceae	T B MS
AUSTRALIA	20	20 August 17 (Opalized Fossils) S	et/4, SS/4 Perf 1	$A_{\mathbf{Y}} 1 A^3 / A$
	Pinecone	20 August 17 (Opanized 1 Ossns) 5	Pinaceae	Fr A
	Wood		1 maccac	VAU
5191a \$1.10	Souvenir sheet 1 each #5	188-01		VIIO
3171a	Souveini sheet i each #3	Set/4, S/A die cut 11 ¹ / ₄		
5192 \$1.10	Pinecone	5007, 5/11 tile cut 11/4	Pinaceae	Fr A
5192 \$1.10 5195 \$1.10			1 maccac	VAU
5195a \$1.10	Booklet pane of 10, 3 eac	ch #5192_2 each #5193		VIIO
5195b	Booklet pane of 20, 5 each	*		
31730	* '	(National Botanic Gardens, Canberr	a 50v) Set/2 Per	$f 14x 14^3/4$
5209 \$1.10	Wee Jasper grevillea, G		Proteaceae	Fl A
5210 \$1.10	Silver banksia, <i>Banksia</i>	1	Proteaceae	Fl A
<i>Σ</i> 210 ψ1.10	Sirver building, Dunnstu	S/A die cut 11 ¹ / ₄	1101040040	1171
5211 \$1.10	Wee Jasper grevillea, G		Proteaceae	Fl A
υ=11 ψ1.10	,, so susper Sicvinica, Or	. C. III impromia	1101040040	1111

BOSN	NIA & I	HERZEGOVINA (Croat Admin.) 2020 May 22	SS/1	
412	5m	Dandelions, Taraxacum campylodes	Asteraceae I	Fl A SS
		2020 November 1 (Flowers) Pai	ir	
418a	2.70m	Veronica saturejoides	Plantaginaceae	Fl A
418b	2.70m	Moltkia petraea	Boraginaceae	Fl A
BRAZ	ZIL	2017 September 22 (Flora of the Atlantic Forest) Sec	e Vol. 69 (1) p.18	
3362	(1.80r) Begonia, Begonia angularis	Begoniaceae	Fl A
	`	Anthurium, Anthurium lucioi	Araceae	Fl A
		White Ipê, Tabebuia roseoalba	Bignoniaceae	Fl A
		Pink Ipê, Handroanthus heptaphyllus	Bignoniaceae	Fl A
CANA	ADA	2020 October 28 (Ptg: "Trenches on the Somme	e" by Mary Hamilto	n)
3252	P (920	e) Poppies, Papaver rhoeas	Papaveraceae	Fl B
3252a	,	Booklet pane of 20	-	
CARI	[BBEA]	N NETHERLANDS 2020 July 1 (Flowers and Plan	ats)	
Inscri	bed "B	onaire"	,	
125		Horiz strip of 5		
125a	75c	Century plant, Agave americana	Asparagaceae	Fl A
125b	75c	Bougainvillea Bougainvillea glabra	Nyctaginaceae	Fl A
125c	75c	Hibiscus, Hibiscus rosa-sinensis	Malvaceae	Fl A
125d	75c	Handroanthus (=Tabebuia) bilbergii	Bignoniaceae	Fl A
125e	75c	Red-sage, Lantana camara	Verbenaceae	Fl A
Inscri	bed "S	aba"		
126		Horiz strip of 5		
126a	75c	Yellow elder, Tecoma stans	Bignoniaceae	Fl A
126b	75c	Striped Barbados lily, Hippeastrum striatum	Amaryllidaceae	Fl A
126c	75c	Moth orchid, Phalaenopsis sp.	Orchidaceae	Fl A
126d	75c	Black-eyed susan, Rudbeckia hirta	Asteraceae	Fl A
123e	75c	Red ginger, Alpinia purpurata	Zingiberaceae	Fl A
Inscri	bed "S	t. Eustatius"		
127		Horiz strip of 5		
127a	75c	Aloe, Aloe vera	Xanthorrhoeaceae	
127b	75c	Anthurium, Anthurium andraeanum	Araceae	Fl A
127c	75c	Oleander, Nerium oleander	Apocynaceae	Fl A
127d	75c	Fuchsia, Fuchsia sp.	Onagraceae	Fl A
127e	75c	Cattleya, Cattleya luteola	Orchidaceae	Fl A
CHIN	IA (TAI	,	attractions) Set/4	
4547	\$8	Camphor trees, Jiji Green Tunnel, Cinnamomum camphora	Lauraceae	ТВ
		2020 October 14 (Poems and Paintings)		
4558	\$12	"New Bamboo" poem by Zheng Banqiao	Poaceae	VA
4559	\$15	"Chrysanthemums" poem by Yuan Zhen Chrysanthemum sp.	Asteraceae	Fl A

CHINA, PE	OPLE'S REPUBLIC 2020 March 20 (Ptg by Wu Gua	anzhing) Set/6	
4703 \$1.20	"Sorghum and Cotton" Sorgo bicolor	Poaceae	VA
	Gossypium hirsutum	Malvaceae	V A
4704 \$1.20	"Melon Vines" Cucumis melo	Cucurbitaceae	V A
	2020 May 17 ("The Dream of Red Mansions" novel by Car X	ueqin) Set/4, SS/1	
4721 \$6	Xiagyun sleeps among the peonies Paeonia officinalis 2020 May 20 (Roses in various colors & birds)	Paeoniaceae Set/4	Fl B
4722 \$1.20	With swallows, Rosa x hybrida	Rosaceae	Fl A
4723 \$1.20	With ducks, Rosa x hybrida	Rosaceae	Fl A
4724 \$1.50	With birds, Rosa x hybrida	Rosaceae	Fl A
4725 \$1.50	With swans, Rosa x hybrida	Rosaceae	Fl A
COLOMBIA	2020 August 14 (Colombian National Parks, 3r	rd series) Sheet/10)
1543d 2000j	o Flora near Laguna las Mellizas, Las Hermosas Gloria Valen	icia de Castaño NP	
	Espeletia hartwegiana	Asteraceae	Fl B
1543i 2000j	Puracé National Park Lepanthes sp. nov.	Orchidaceae	Fl A
CONGO RE	PUBLIC 1996 (Anniversaries: FAO 50y) Se	et/5	
1133J 300fr	Cacao, Theobroma cacao	Malvaceae	Fr B
	Maize, Zea mays	Poaceae	Fr B
	Manioc, Manihot esculentum	Euphorbiaceae	V B
FRENCH P	OLYNESIA 2020 August 20 Single		
1253 100fr	Bananas, Musa x paradisiaca	Musaceae	Fr A
HUNGARY	2020 August 5 (Flora and Fauna) Se	et/4	
4565	Horiz strip of 4		
	Cone flower, Rudbeckia purpurea	Asteraceae	Fl A
4565c 185fc	Tatar maple, Acer tataricum	Sapindaceae	ΤA
ICELAND	2020 October 29 (Garden vegetables)	Set/2	
) Carrots, Daucus carota	Apiaceae	V A
1524 (315)	Turnip, Brassica rapa	Brassicaceae	V A
JAPAN		et/20	
4382	Sheet of 10 Ptg: "Trigge" from gazall of Sakai	Iridaceae	Fl A
4382b 63¥	Ptg: "Irises" from scroll of Sakai Iris japonica		Fl A
4382j 63¥ 4383	Ptg: Water Lilies by Monet <i>Nymphaea sp.</i> Sheet of 10	Nymphaeaceae	ГΙА
4383b 84¥	Ptg: Irises from scroll of Sakai	Iridaceae	Fl A
4383j 84¥	Ptg: "Water Lilies" by Monet <i>Nymphaea sp</i> .	Nymphaeaceae	Fl A
1505) 011	2020 April 1 Set/10	тутриисиссис	1171
4384	Sheet of 10		
4384a 63¥	White roses, <i>Rosa x hybrida</i>	Rosaceae	Fl A
4384b 63¥	Pink roses, Rosa x hybrida	Rosaceae	Fl A
4384c 63¥	· · · · · · · · · · · · · · · · · · ·		
	Purple roses, Rosa x hybrida	Rosaceae	Fl A
4384d 63¥	Purple roses, <i>Rosa x hybrida</i> Orange roses, <i>Rosa x hybrida</i>	Rosaceae Rosaceae	Fl A Fl A

JAPAN (con	tinued)		
4384e 63¥	Red roses, Rosa x hybrida	Rosaceae	Fl A
4385	Sheet of 10		
4385a 84¥	Purple roses, Rosa x hybrida	Rosaceae	Fl A
4385b 84¥	Orange roses, Rosa x hybrida	Rosaceae	Fl A
4385c 84¥	Red roses, Rosa x hybrida	Rosaceae	Fl A
4385d 84¥	Pink roses, Rosa x hybrida	Rosaceae	Fl A
4385e 84¥	White roses, Rosa x hybrida	Rosaceae	Fl A
	2020 April 6 (UN Conference on Crime Prévention	& Criminal Justice)	Set/5
4386	Sheet of 10	,	
4386b 84¥	Cherry blossom emblem, Prunus serrulata	Rosaceae	Fl B MS
	2020 April 15 Set/3		
4388 84¥	Stylized tree		T A S
4389 94¥	Stylized tree		T A S
	2020 April 20 (Screen Painting by Ko	orin Ogata) Set/2	2
4390 84¥	Plum tree with white blossoms, <i>Prunus mume</i>	Rosaceae	Fl A
4391 84¥	Plum tree with red blossoms, Prunus mume	Rosaceae	Fl A
4391a	Horiz pair		
	2020 May 14 (Stylized Flow	ers) Set/5	
4396	Sheet of 10		
4396a 84¥	Roses, Rosa x hybrida	Rosaceae	Fl A S
	Lily-of-the-valley, Convallaria majalis	Asparagaceae	Fl A S
4396b 84¥	Calla lilies, Zantedeschia aethiopica	Araceae	Fl A S
	Lily-of-the-valley, Convallaria majalis	Asparagaceae	Fl A S
4396c 84¥	Lily-of-the-valley, Convallaria majalis	Asparagaceae	Fl A S
4396d 84¥	Lilies, Lilium sp.	Liliaceae	Fl A S
4396e 84¥	Roses, Rosa x hybrida	Rosaceae	Fl A S
	Lily-of-the-valley, Convallaria majalis	Asparagaceae	Fl A S
4397	Sheet of 10		
4397a 94¥	U/I		Fl A S
4397b 94¥	U/I		Fl A S
	2020 June 1 (Summer Greeting	ngs) Set/20	
4402	Sheet of 10		
4402a 63¥	Red ginger, Alpinia purpurata	Zingiberaceae	Fl A MS
4402b 63¥	Palm tree	Arecaceae	T A MS
4402c 63¥	Palm tree	Arecaceae	T A MS
4402d 63¥	Papaya, Carica papaya	Caricaceae	Fr A MS
4402e 63¥	Sunflower, Helianthus annuus	Asteraceae	Fl A MS
4402f 63¥	Bird-of-Paradise, Strelitzia regina	Musaceae	Fl A MS
4402g 63¥	Hibiscus, Hibiscus rosa-sinensis	Malvaceae	Fl A MS
4402h 73¥	Frangipani, <i>Plumeria rubra</i>	Apocynaceae	Fl A MS
4402j 63¥	Hibiscus, Hibiscus rosa-sinensis	Malvaceae	Fl A MS

JAPAN (con	tinued)		
4403	Sheet of 10		
4403a 84¥	Palm tree	Arecaceae	T A MS
4403b 84¥	Frangipani, <i>Plumeria rubra</i>	Apocynaceae	Fl A MS
4403c 84¥	Palm tree	Arecaceae	T A MS
4403e 84¥	Red ginger, Alpinia purpurata	Zingiberaceae	Fl A MS
4403g 84¥	Frangipani, Plumeria alba	Apocynaceae	Fl A MS
	2020 June 10 (Flora and Fauna of Irio	mote island) Set/	10
4404	Sheet of 10		
4404g 84¥	Bamboo orchid, Arundina graminifolia	Orchidaceae	Fl A MS
4404h 84¥	Screw pine cone, Pandanus utilis	Pandanaceae	Fr A MS
4404i 84¥	Powder-puff tree, Calliandra haematocephala	Fabaceae	Fl A MS
4404j 84¥	Loop-root mangrove, Rhizophora mucronata	Rhizophoraceae	T A MS
	2020 June 19 Set/20		
4407	Sheet of 10		
4407a 63¥	Mulberries, Morus nigra	Moraceae	Fr A
4407b 63¥	Bitter melon, Momordica charantia	Cucurbitaceae	Fr A
4407g 63¥	Pea pod Pisum sativum	Fabaceae	Fr A
4407i 63¥	Dianthus, Dianthus sp.	Caryophyllaceae	e Fl A
4407j 63¥	Roses, Rosa x hybrida	Rosaceae	Fl A
4408	Sheet of 10		
4408h 84¥	Ear of corn, Zea mays	Poaceae	Fr A
4408i 84¥	Sunflowers, Helianthus annuus	Asteraceae	Fl A
	2020 August 3 (Philanippon 2021 World Stam	p Exhibition) Set/	10
4422	Sheet of 10		
4422b 84¥	Cherry blossoms, Prunus serrulata	Rosaceae	Fl A MS
4422d 84¥	Cosmos flowers, Cosmos bipinnatus	Asteraceae	Fl B MS
4422e 84¥	Larch forest, Larix kaempferi	Pinaceae	T A MS
4422f 84¥	Cherry blossoms, Prunus serrulata	Rosaceae	Fl A MS
4422g 84¥	Tea plantation, Camellia sinensis	Theaceae	V A MS
4422h 84¥	Azalea garden, Rhododendron sp.	Ericaceae	Fl A MS
4422i 84¥	Cosmos flowers, Cosmos bipinnatus	Asteraceae	Fl B MS
	2020 August 18 Set/10		
4423	Sheet of 10		
4423a 63¥	Ginkgo leaves, Ginkgo biloba	Ginkgoaceae	V A
4423b 63¥	Dahlia, Dahlia x hybrida	Asteraceae	Fl A
	Cosmos, Cosmos bipinnatus	Asteraceae	Fl A
4423c 63¥	Gentians, Gentiana scabra	Gentianaceae	Fl A
4423d 63¥	Chrysanthemum sp.	Asteraceae	Fl A
4423e 63¥	Roses, Rosa x hybrida	Rosaceae	Fl A
4424	Sheet of 10		
4424a 84¥	Maple leaves, Acer palmatum	Sapindaceae	V A
4424b 84¥	Dahlia, <i>Dahlia x hybrida</i>	Asteraceae	Fl A
	Cosmos, Cosmos bipinnatus	Asteraceae	Fl A

JAPAN (cont	inued)		
4424c 84¥	Chinese bellflowers, Platycodon grandiflorus	Campanulaceae	Fl A
4424d 84¥	Cockscomb, Celosia argentea	Amaranthaceae	Fl A
4424e 84¥	Roses, Rosa x hybrida	Rosaceae	Fl A
	2020 August 21 (Autumn Greetings) Se	et/20	
4425	Sheet of 10		
4425a 63¥	Maple leaf, Acer rubrum	Sapindaceae	V A
4425b 63¥	Pine cone, <i>Pinus sp</i> .	Pinaceae	Fr A
4425c 63¥	Pear, Pyrus communis	Rosaceae	Fr A
425d 63¥	Red leaf		V A
4425e 63¥	Oak leaf, Quercus glauca	Fagaceae	V A
4425f 63¥	Persimmon, Diospyros kaki	Ebenaceae	Fr A
4425g 63¥	Pumpkin, Cucurbita pepo	Cucurbitaceae	Fr A
4425h 63¥	Orange leaf		V A
4425i 63¥	Acorns, Quercus sp.	Fagaceae	Fr A
4425j 63¥	Fig, Ficus carica	Moraceae	Fr A
4426	Sheet of 10		
4426a 84¥	Acorns, Quercus sp.	Fagaceae	Fr A
4426b 84¥	Ginkgo leaves, Ginkgo biloba	Ginkgoaceae	V A
4426c 84¥	Squashes, Cucurbita pepo	Cucurbitaceae	Fr A
4426d 84¥	Pine cones, <i>Pinus sp.</i>	Pinaceae	Fr A
4426e 84¥	Persimmons, Diospyros kaki	Ebenaceae	Fr A
4426f 84¥	Rambutans, Nephelium lappaceum	Sapindaceae	Fr A
4426g 84¥	Leaves		V A
4426h 84¥	Pears, Pyrus communis	Rosaceae	Fr A
4426i 84¥	Figs, Ficus carica	Moraceae	Fr A
4426j 84¥	Leaves		VA
KOREA, SO	UTH 2020 May 29 (Intl. Year of Plant Healt	h) Single	
	Stylized plants	, &	V S U
	2020 August 7(Protected Marine Life)	Set/4	
2574a 380w	Eelgrass, Zostera marina	Zosteraceae	V A
	Asian surf grass, <i>Phyllospadix japonicus</i>	Zosteraceae	V A
MALTA		air	
1692 59c	,	Vitaceae	Fr B
1692 59c	Vineyard in Malta, grapes, <i>Vitis vinifera</i> Vineyard in Slovakia, <i>Vitis vinifera</i>	Vitaceae	V B
		vitaceae	V D
MONGOLIA	2020 July 8 (Landscape types of 201	<i>'</i>	
	Campanula stevenii subsp. turczaninovii	Campanulaceae	Fl B
	Ranunculus kamchaticus =(Oxygraphis glacialis)	Ranunculaceae	Fl B
2947 1300t	Dwarf white waterlily Nymphaea candida	Nymphaeaceae	Fl B
	Glacial snow lotus Saussurea glacialis	Asteraceae	Fl B
	Lady's slipper Cypripedium calceolus	Orchidaceae	Fl B
	Siberian lily Lilium pensylvanicum	Liliaceae	Fl B
2951 1300t	Martagon lily Lilium martagon	Liliaceae	Fl B

MOROCCO	2020 February 27		
(Flow	ver type of 1975-81 Redrawn, See Plants on Stamps Vol 2 p 62	& Vol 3 p 253)	Set/5, S/2
1285	Booklet pane of 5		
1285a 375d	Asteriscus imbricatus	Asteraceae	Fl A
1285b 375d	Pansy, Viola x wittrockiana	Violaceae	Fl A
1285c 375d	Poppy, Papaver rhoeas	Papaveraceae	Fl A
1285d 375d	Geranium, Pelargonium sp.	Geraniaceae	Fl A
1285e 375d	Daisy, Chrysanthemum sp.	Asteraceae	Fl A
	2020 June 5 (World Environment Da	y) Set/2	
1287b 9d	Mt. Atlas Mastic tree, Pistacia atlantica	Anacardiaceae	ΤA
1287d	Same species perf 131/4		
1287e	Souvenir sheet #1287c & 1287d		
PAPUA NEV	W GUINEA 2020 May 27 (Breadfruit) Set/8, SS	3/1	
2001 1.60k	Male & female flowers, Artocarpus altilis	Moraceae	Fl A
2002 2.50k	Female flower, Same species		Fl A
2003 3.45k	Fruit, Same species		Fr A
2004 10k	Mature fruit, Same species		Fr A
2005	Sheet of 4		Fl A MS
2005a 5k	Flower, Same species		Fr A MS
2005b 5k	Sprouting fruit, Same species		V A MS
2005c 5k	Leaf, Same species		Fr A MS
2005d 5k	Fruit, Same species		Fr A MS
2006 20k	Mature fruit, Same species		Fr A MS
	2014 #1640-41 surcharged, sans-seri		
1734F 1.30k	1 2	Orchidaceae	Fl A
1734G 1.30k	on 1.20k Dendrobium williamsianum	Orchidaceae	Fl A
RUSSIA	2020 August 24 (Prince Golitsyn, vinta	ner) Single	
6192 50r	Vineyard, Vitis vinifera	Vitaceae	V B
SAN MARI	NO 2020 June 16 (Asiago International Philatelic Art Prin	ze 50y) Single, en	nbossed
	Edelweiss, Leontopodium alpinum	Asteraceae	Fl A
SERBIA	2020 July 15 (Berries) Set/2		
918 8d	Raspberries, Rubus idaeus	Rosaceae	Fr A
919 11d	Cherries, Prunus avium	Rosaceae	Fr A
)1) 11 u	2020 November 3 (Natural History Mu		
927a 27d	Nepeta rtanjensis	Lamiaceae	Fl A
SLOVAKIA	2020 June 17 (Kosice Botanical Garde	en 70y) SS/	1
	Magnolia, Magnolia grandiflora	Magnoliaceae	Fl A SS
		air	
860a €1.65	Vineyard in Slovakia, Vitis vinifera	Vitaceae	V B
	Vineyard in Malta, grapes Vitis vinifera	Vitaceae	Fr B
	A & S. SANDWICH IS. 2020 October 15 (Definitives)	Set/12	
620 2p	Greater burnet, Sanguisorba officinalis	Rosaceae	Fl A
020 2p	Greater burnet, bunguisorou officinums	Nosaccac	II A

UNITED NATIONS

01111		110110			
New Y	ork		2020 December 5 (World Soil Day)	Set/5 + labels	
1259	\$1.20	Stylized grain		Poaceae	Fr A
1262	\$1.20	Stylized tree			TAU
UNIT	ED STA	ATES	2020 October 16 (Winter Scenes)	Set/10	
5534	(55c)	Unidentified conifers		Pinaceae	ТВU

Garden Beauty

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

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

Gardens can be as small as a collection of pots on a windowsill or as large as space, money, and time



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

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

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

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

From the USPS website:

https://store.usps.com/store/product/buy-stamps/garden-beauty-S 683104

New Plants in the Philatelic Herbarium

By Christopher E. Dahle, BU 1269

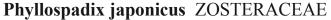
Zostera marina ZOSTERACEAE

Common name: Eelgrass

Synonyms: 14

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

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



Common name: Asian surf grass

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

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





Campanula stevenii subsp. turczaninovii CAMPANULACEAE

Synonyms: 12 synonyms

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

Mongolia Scott # 2945. Issued 8 July 2020 in a set of 7, Mongolian

Beautiful Landscapes III. Printed by offset in sheets of 12.

Grevillea iaspicula PROTEACEAE

Common name: Wee Jasper Grevillea

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

Australia Scott #5209 and 5211. Issued 13 October 2020 in a set of 2 for the 50th Anniversary of the National Botanic Gardens in

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



Veronica saturejoides PLANTAGINACEAE

Common name: Vriskova čestoslavica

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

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



Moltkia petraea BORAGINACEAE

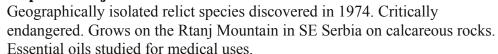
Common name: Modro lasinje

Synonyms: *Echium petraeum, E. rosmarinifolium, Lithospermum petraeum, L. rosmarinifolium, Lobostemon rosmarinifolius*Small semi-evergreen shrub 20-40 cm with erect, hairy stems. Leaves alternate, linear to oblong, 1-5 cm long 1-6 mm wide, dark green. Violetblue flowers in dense terminal cymes, 3-4 cm, from May to July. Found in mountains from Albania to Bosnia and Herzegovina.



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

Nepeta rtanjensis LAMIACEAE



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



ANIMALS; DOGS & CATS; HORSES; INSECTS; BUGS BUTTERFLIES; MALARIA; FLOWERS & PLANTS; ORCHIDS MUSHROOMS; MARINE LIFE; FISH; TURTLES; REPTILES SHELLS; WHALES & SEALS; BIRDS; MINERALS MIXED BIOLOGY TOPICS

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DJIBOUTI

FUNGI

Editor

Paul A. Mistretta, BU 1681

Now Listings



Set/4, SS/1

		New Listings		
Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
BELC	GIUM	et/5		
2934a	1 (98c) Cru	cibulum crucibuliforme	Nidulariaceae	A
2934b	1 (98c) Bask	et stinkhorn, Clathrus ruber	Phallaceae	A
2934c	1 (98c) Devi	l's fingers, Clathrus archeri	Phallaceae	A
2934d	Geastraceae	A		
2934e	Dacrymycetaceae	A		
BELA	ARUS	2020 October 26 (Slime Molds)	Set/3, SS/6	
1173	A (5.4k)	Arcyria globosa	Arcyriaceae	A
1174	N (1.32r)	Cribaria purpurea	Cribariaceae	A
1175	H (1.68r)	Physarum album	Physaraceae	A
1175a		Souvenir sheet of 6, 2 eacch #1173-75		

Note: Historically included in the Kingdom "Fungi" the 'plasmodia or acellular slime molds' are now commonly placed in 'Myxogastria', which, depending on the taxonomy accepted, removes them from the kingdom "Fungi". A relatively nontechnical explanation for this can be found at: https://en.wikipedia.org/wiki/Kingdom_(biology)#Eight_kingdoms. I include these three stamps since when I was studying Mycology in grad school (45 years ago) Myxomycetes was still considered to be members of the Kingdom "Fungi". Plus, quite simply, they are fascinating organisms with some unique

considered to be members of the Kingdom "Fungi". Plus, quite simply, they are fascinating organisms with some unique characteristics not found in other fungi.				
CZECH REPUBLIC	1	2020 April 22 (Mushrooms)	Set/2	
3286 B (19k)	Fly agaric, Amanita	muscaria 🖁	Amanitaceae	A
(4.04.)				

3286 B (19K)	Fly aganc, Amanita muscaria ≈	Amanitaceae	Α
3287 B (19k)	Satan's bolete, Rubroboletus satanas 🌯	Boletaceae	A
3287a	Booklet pane of 10 each of Sc#3286 & 3287		

2019 December 12 (Mushrooms)

1886a 250t	Fr Orange birch bolete, Leccinum versipelle	Boletaceae	A
1886b 250t	Tr White beech mushroom, Hypsizygus tessalatus	Tricholomataceae	A
1886c 250t	Fr Rough stemmed bolete, Scaber stalk, Birch bolete, Lea	ccinum scabrum Boletaceae	A
1886d 250t	r Yellow morel, Morchella esculenta	Morchellaceae	A
1896 1000	Ofr Penny bun, Cep, Porcino, Boletus edulis	Boletaceae	A

				1				
ESTC	NIA					2020 August 28 (Mushrooms)	Single	
931	€0.90	Panther	cap,	False	blusher,	Amanita pantherina ဳ	Amanitaceae	A

JAPAN	2020 June 16 (Mushrooms) Set/10	
4405	Miniature sheet of ten stamps	

4405b 63¥	Dried seaweed, fish and mushrooms; 3 stylized mushrooms	C G

MONTENEGRO	2020 March 16 (M	Iushrooms)	Single

459 95c Berkeley's earthstar, Geastrum berkeleyi Geastraceae A

SAN MARINO 2020 November 11 (Intl Day of Awareness on Food Loss and Waste Reduction) Single

2084 €1.15 Mushrooms among other foods

 \mathbf{C}



MAMMALIA

Editor Michael Prince, LM 68



Scott# Denom ALGERIA	New Listings Common Name/Scientific Name 2019 May 11 (Protected Species) SS/2	Family/Subfamily	Code
1786a 25d	Arabian Oryx, Oryx leucoryx	Bovidae	A
AUSTRALIA	2020 August 4 (Wildlife Recovery) Set	/5 Perf 14x14 ³ / ₄	
	2	Dasyuridae	A
5178 \$1.10 5178a	Koala, <i>Phascolarctos cinereus</i> Souvenir sheet of 6 #5273-78 SA, die cut 11 ¹ / ₄ Set/5	Phascolarctidae	A
5181 \$1.10 5281a	Kangaroo Island Dunnart, <i>Sminthopsis aitkeni</i> NEW Booklet pane of 10	Dasyuridae	A
BRAZIL	2019 September 23 (Fauna) Set/3		
3427b (2r70)	Maned Three-toed Sloth, Bradypus torquatus	Bradypodidae	A
3427c (2r70)	Black Lion Tamarin, Leontopithecus chrysopygus NEW	Cebidae	A
CARIBBEAN Inscribed "B 122d 75c	N NETHERLANDS onaire" 2020 July 1 (Marine Life) Set/5 Spinner Dolphin, Stenella longirostris	Delphinidae	A
DJIBOUTI	2019 December 12 (Dolphins) Minishe	1	
	Indo-Pacific Bottlenose Dolphin, <i>Tursiops aduncus</i>	Delphinidae	A
1879b 250fr	Spinner Dolphin, Stenella longirostris	Delphinidae	A
	Striped Dolphin, Stenella coeruleoalba	Delphinidae	A
1879c 250fr	Common Bottlenose Dolphin, Tursiops truncatus	Delphinidae	A
1879d 250fr	Pacific White-sided Dolphin, Lagenorhynchus obliquidens	Delphinidae	A
	Hector's Dolphin, Cephalorhynchus hectori	Delphinidae	A
1889 1000fi	Amazon River Dolphin, Inia geoffrensis	Iniidae	A SS
Margin	Long-beaked Common Dolphin, Delphinus capensis	Delphinidae	A SSZ
	Common Bottlenose Dolphin, Tursiops truncatus	Delphinidae	A SS Z
	2019 December 12 (Antarctic Animals	<i>,</i>	
	Weddell Seal, Leptonychotes weddellii	Phocidae	A
	Crabeater Seal, Lobodon carcinophagus	Phocidae	A
1895 1000fi	Humpback Whale, Megaptera novaeangliae	Balaenopteridae	A
GERMANY	2020 September 3 (Juvenile Animals) Set/2		
3181 80c	European Otter, Lutra lutra	Mustelidae	A
3182 95c	Hazel Dormouse, Muscardinus avellanarius	Gliridae	A

GREENLAN	2020 May 18 (Mammals) Set/2		
842 16k	Muskox, Ovibos moschatus	Bovidae	A
843 18k	Walrus, Odobenus rosmarus	Od	obenidae
A			
HONG KON	IG 2020 June 23 (Qinghai Hoh Xii UNESCO Wo	orld Heritage Site)	SS/1
2087 \$10	Chiru, Pantholops hodgsonii	Bovidae	A SS Z
	2020 August 18 (Ocean Park Hong Kong The	me Park) Set/6, SS	/1
2088 \$2	Indo-Pacific Bottlenose Dolphin, Tursiops aduncus	Delphinidae	A
2090 \$3.40	Golden Snub-nosed Monkey, Rhinopithecus roxellana	Cercopithecidae	A
2091 \$3.70	Meercat, Suricata suricatta	Herpestidae	A
2092 \$4.90	Giant Panda, Ailuropoda melanoleuca	Ursidae	A
JAPAN	2020 June 10 (Flora and Fauna of Irion	mote Island) Set/10	
4404	Sheet of 10	,	
4404d 84¥	Leopard Cat, Prionailurus bengalensis euptilurus	Felidae	A MS
	2020 July 17 (Protection of Historic Sites and Natural	Monuments) Set/1	0
4411	Sheet of 10		
4411i 84y	Japanese Serow, Capricornis crispus	Bovidae	A
MALI	2014 January 11 (Serval type of 2014)	Single	
1167 10001	r Serval, Leptailurus serval	Felidae	A
MONGOLIA	2020 July 8 (Landscapes with Fauna an	nd Flora) Set/7	
	Mongolian Five-toed Jerboa, <i>Allactaga sibirica</i> NEW	Dipodidae	В
	Snow Leopard, Panthera uncia	Felidae	В
	Red Deer (Elk), Cervus elaphus	Cervidae	В
	Mongolian Gazelle, Procapra gutturosa	Bovidae	В
	Eurasian Red Squirrel, Sciurus vulgaris	Sciuridae	В
NAMIBIA	2019 April 25 (Whales, inscribed "Reprint" ty	ne of 2019) Single	
1385 (\$32)	Pygmy Sperm Whale, Kogia breviceps	Kogiidae	A
(+-)	2019 August 1 (Wild Cats) Set/3	. 6	
1390 (\$8.40))Lion, Panther leo	Felidae	A
	South African Fur Seal, Arctocephalus pusillus	Otariidae	В
1391 (\$8.40))Cheetah, Acinonyx jubatus	Felidae	A
	Steenbok, Raphicerus campestris	Bovidae	В
1392 (\$8.40	1)Leopard, Panthera pardus	Felidae	A
	Rock Hyrax, Procavia capensis	Procaviidae	В
NORWAY	2020 April 17 (Ship and Orca) Single		
1896 (26k)	Orca (Killer Whale), Orcinus orca	Delphinidae	В
ROMANIA	2020 June 10 (Squirrels) Set/4 + labels	-	
6424 3.301	Indian Giant Squirrel, Ratufa indica	Sciuridae	A
6424a	Sheet of 5 + label	STATIONS	11
6425 51	Indian Palm Squirrel, Funambulus palmarum	Sciuridae	A
6425a	Sheet of 5 + label		
•			

ROMANIA (continued)

6426	8.501	Eastern Grey Squirrel, Sciurus carolinensis	Sciuridae	A
6426a		Sheet of 5 + label		
6427	121	Eurasian Red Squirrel, Sciurus vulgaris	Sciuridae	A
6427a		Sheet of 5 + label		
UNIT	ED STA	ATES 2020 October 16 (Winter Scenes)	Set/10	
5532	(55c)	Mule Deer, Odocoileus hemionus	Cervidae	A
5539	(55c)	Desert Cottontail, Sylvilagus audubonii	Leporidae	A
	()		- T	

Jersey Sea Life

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

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

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

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





ORNITHOLOGY

Editor Glenn G. Mertz, BU 1455



Corrections/Updates

CARIBBEAN NETHERLANDS, V69(4), page 247

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

DJIBOUTI, V69(2), page 110

Update: Scott has assigned numbers to the following issues.

Kingfishers, (Set/4=1880a-d) (SS/1=1890)

Raptor, (Set/4-1881a-d)) (SS/1-1891)

Water Birds, (Set/4=1882a-d) (SS/1=1892)

The Antarctic, (Set/4=1885b,d) (SS/1=1895)

GUINEA-BISSAU, V61(1), page 42

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

TOGO, V62(1), page 33

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

				Ne	ew issues				
Scott#		Denom	Comm	onname/Scienti	ific Name]	Family/Subfa	amily	Code
ANTIO	GUA			2020	June 3	, L	Set/4, SS/1		A*
3558a	\$1.00	Turkey	Vulture, Cati	<i>hartes aura</i> (i	in flight)		(Cathartidae	
3558b	\$1.00	Same s	species, land	ing					
3558c	\$1.50	Same s	species, stand	ding in tall	grass				
3558d	\$2.00	Same s	species, head	only					
3559	\$14.00	SS	Same specie	s, on a roof					
				2020	June 3	(Exotic	Birds) Set/	4. SS/1	A*
3566a	\$2.00	Americ	an Flamingo,	Phoenicopte	erus ruber	on bea	ach)	Phoenicopt	eridae
3566b	\$3.00	Same s	species, in pi	nk					
3566c	\$4.00	Same s	species, with	head turned	back				
3566d	\$5.00	Same s	pecies, standi	ng on one le	g				
3567	\$14.00	SS	Same species	, mother and	chick				

ARG	ENTIN.	A 1995 (Fauna Type II of 1995)		A *
1889	\$0.25	` "	Spheniscidae	
1889a	\$0.25	Same species, 17mm tall		
AUST	TRALIA	2020 August 4 (Wildlife Recovery)	Set/6	A *
		8 (),	Ieliphagidae	
		2020 September 7 (Art on Water	1 0	A*
5196	\$1.10	Sacred Kingfisher, Todiramphu sanctus	Alcedinidae	
5200	\$1.10	Same species, S/A		
5200a	l	Booklet pane of 10		
BAH	AMAS	2019 October 10 (60th Anniv. Bahamas National	Trust) Set/4	A*
1507	15c	Cuban Parrot, Amazona leucocephala P	sittacidae	
1510	70c	American Flamingo, <i>Phoenicopterus ruber</i> P	hoenicopteridae	
BELA	ARUS	2020 March 3 Single		A *
1172	(1,86r) Western Capercaillie, Tetrao urogallus	Phasianidae	
BELO	GIUM	2020 January 27 (Registration) Sin	ngle	A *
F7	(€5.67		natidae	
		2020 March 16 (Acknowledgement of Red	ceipt) Single	A*
H2	(€1.36		Anatidae	
CARI	[BBEA]	N NETHERLANDS 2020 July 1		A *
		onaire" Set/5		
116a	75c	Bananaquit, Coereba flaveola	hraupidae	
116b	75c	± ·	/limidae	
116c	75c	Carib Grackle, Quiscalus lugubris	cteridae	
116d	75c	Brown-throated Parakeet, Eupsittula pertinax P	sittacidae	
116e	75c	Venezuelan Troupial, Icterus icterus	cteridae	
Inscri	ibed "S			
117a	75c	,	elecanidae	
117b	75c	, , , , ,	aridae	
117c	75c	,	Oriolidae	
117d	75c	37	aridae	
17e	75c	1 37	andionidae	
		t. Eustatius" Set/5	المسمطين طمم	
118a	75c	,	Charadriidae	
118b 118c	75c 75c		Scolopacidae Frochilidae	
118d	75c		Falconidae	
118 u	75c		Cuculidae	
		•	Cacandae	A -1-
		CELING) ISLANDS 2020 May 12 Set/3, SS/3	N1: J	A*
407		3 /	Sulidae	
408	\$1.10	Red-footed Booby, Sula sula	Sulidae	
	¢1 10	Magkad Dooby Cula doots later	hilidaa	
409		Masked Booby, Sula dactylatra S, #407-409	Sulidae	

COLOMBIA	2019 December 20 (Department of Caq	ueta) Set/12	A*
1532b 2,000p	Blue-gray-Tanager, Thraupis episcopus	Thraupidae	
	2019 December 27 (Department of Putumayo, type of	2003) Set/12	A*
1533e 2,000p	Blue-and-yellow Macaw, Ara ararauna	Psittacidae	
	2020 March 20 (2020 Risaralda Bird Fe	estival) Sheet/10	A*
1537a 5,000p	Black-and-chestnut Eagle, Spizaetus isidori	Accipitridae	
1537b 5,000p	Subtropical Doradito, <i>Pseudocolopteryx acutipennis</i> V69(3)	Tyrannidae	
1537c 5,000p	Andean Cock-of-the Rock, Rupicola peruvianus	Cotingidae	
1539d 5,000p	Striolated Manakin, Machaeropterus striolata V69(3)	Pipridae	
1537e 5,000p	Golden-headed Manakin, Ceratopipra erythrocephala	Pipridae	
1537f 5,000p	Yellow-headed Brushfinch, Atlapetes flaviceps	Passerellidae	
1537g 5,000p	Cauca Guan, Penelope perspicax	Cracidae	
1537h 5,000p	Black-and-gold Tanager, Bangsia melanochlamys	Thraupidae	
1537i 5,000p	o Indigo-winged Parrot, Hapalopsittaca fuertesi	Psittacidae	
	2020 June 6 (Scenes from Colombian	Parks) Sheet/9	A*
1539c 500p	Blue-throated Starfrontlet, Coeligena helianthea V69(3)	Trochilidae	
1539e 500p	Vermilion Cardinal, Cardinalis phoeniceus	Cardinalidae	
CUBA	2019 June 5 (Animals and Landmarks in thei	r Habitats) Set/3	A*
6168 75c	Yellow-faced Grassquit, Tiaris olivaceus	Thraupidae	
	2019 June 16 (Owls) Set/6, SS/	•	A*
6179 20c	Barn Owl, Tyto alba	Tytonidae	
6180 40c	Stygian Owl, Asio stygius	Strigidae	
6181 50c	Short-eared Owl, Asio flammeus	Strigidae	
6182 75c	Long-eared Owl, Asio otus	Strigidae	
6183 85c	Burrowing Owl, Athene cunicularia	Strigidae	
6184 90c	Bare-legged Owl, Margarobyas lawrencii	Strigidae	
6185 lp	SS Cuban Pygmy Owl, Glaucidium siju	Strigidae	
	2019 October 9 (Farm Animals)	Set/6, SS/1	A*
6195 15c	Mallard, Anas platyrhynchos domesticus	Anatidae	
6196 35c	Red Junglefowl, Gallus gallus	Phasianidae	
61978 75c	Graylag Goose, Anser anser	Anatidae	
CZECH REI	PUBLIC 2020 March 11 Set/3		A*
	European Goldfinch, Carduelis carduelis (Top bird)	Fringillidae	
,	Common Chaffinch, Fringilla coelebs (Ctr bird)	Fringillidae	
	Hawfinch, Coccothraustes coccothraustes (Bottom bird)	Fringillidae	
3822 B (19k)		Paridae	
,	Crested Tit, Lophophanes cristatus (UL)	Paridae	
	(Stamp has genus of <i>Parus</i>)		
	Eurasian Blue Tit, Cyanistes caeruleus (CR)	Paridae	
	(Stamp has genus of <i>Parus</i>)		
	Great Tit, Parus major (LC)	Paridae	

CZECH REP	UBLIC	(continued))
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CZEC	CH REP	'UBLIC (continued)		
		2020 June 17 Set/2		A*
3832 I	B (19k)	Eurasian Magpie, Pica pica (Top bird)	Corvidae	
		Eurasian Jay, Garrulus glandarius (CTR bird)	Corvidae	
		Common Raven, Corvus corax (LCTR)	Corvidae	
3833 I	B (19k)	European Robin, Erithacus rubecula (Top bird)	Muscicapidae	
		Common Redstart, Phoenicurus phoenicurus (CTR bird)	Muscicapidae	
		Fieldfare, Turdus pilaris (LL)	Turdidae	
DJIB(DUTI	2020 April 27 (NZ 2020 International Stamp I	Exhibition) Set/4. SS	5/1 A*
N/A		North Island Brown Kiwi, Apteryx mantelli	Apterygidae	
N/A		Southern Brown Kiwi, Apteryx australis	Apterygidae	
N/A		Little Spotted Kiwi, Apteryx owenii	Apterygidae	
N/A		Okarito Brown Kiwi, Apteryx rowi	Apterygidae	
ESTO		2020 April 30 Single	1 30	A*
923	65v	Great Crested Grebe, <i>Podiceps cristatus</i>	Podicipedidae	11
		, 1	-	A &
		ISLANDS 2020 August 10 (Stamps and C		A*
1268	32p	Southern Rockhopper Penguin, Eudyptes chrysocome	Spheniscidae	
1269	68p	King Penguin, Aptenodytes patagonicus	Spheniscidae Spheniscidae	
1270	70p	Magellanic Penguin, Spheniscus magellanicus	Spheniscidae	
1271 1272		Gentoo Penguin, Pygoscelis papua Magaroni Panguin, Fydyntag almusalanhus	Spheniscidae Spheniscidae	
12/2	21.20	Macaroni Penguin, <i>Eudyptes chrysolophus</i> 2020 October 1 (Mike Peake B	Spheniscidae	A*
1277	32p	Black-necked Swan, Cygnus melancoryphus	Anatidae	A.
1277	49p	Black-rowned Night-Heron, Nycticorax nycticorax	Ardeidae	
1279	78p	Upland Goose, Chloephaga picta	Anatidae	
1280	-	Kelp Gull, Larus dominicanus	Laridae	
1281	£1.26	Variable Hawk, Geranoaetus polyosoma	Accipitridae	
1282		Upland Goose, Chloephaga picta	Anatidae	
			Tillatiaac	
	AND (Å	, , , , , , , , , , , , , , , , , , ,	1 11 1 60	0 1
		frama" S.A. stamps, featuring four different woodpecker speci		
	-	ed in 2019. Martin Frankevicz, New Issues Editor at Scott Pub	•	
	_	will not is issued a Scott number as they do not list "frama" star	-	ataiog.
		t time I've ever received "frama" machine issued stamps, but v		
NV		Great Spotted Woodpecker, <i>Dendrocopos major</i>	Picidae	
NV		Lesser Spotted Woodpecker, <i>Dendrocopos minor</i>	Picidae	
NV	-	Black Woodpecker, <i>Dryocopus martius</i>	Picidae	
NV	1,60€	Gray-headed Woodpecker, Picus canus	Picidae	
FRAN		2020 March 6 (Curiosities) Set		A*
5803	(97c)	Burrowing Owl, Athene cunicularia	Strigidae	A ata
5015	(05.)	2020 April 3 (Bird Eggs) Set/1		A*
5817	(97c)	Common Kestrel, Falco tinnunculus	Falconidae	
5818	(97c)	Carrion Crow, Corvus corone	Corvidae	

FRAN	ICE (co	ntinued)		
5819	(97c)	Spotted Flycatcher, Muscicapa striat	Muscicapidae	
5820	(97c)	Ostrich, Struthio camelus	Struthionidae	
5821	(97c)	Barn Swallow, Hirundo rustica	Hirundinidae	
5822	(97c)	Rock Bunting, Emberiza cia	Emberizidae	
5823	(97c)	House Sparrow, Passer domesticus	Passeridae	
5824	(97c)	Song Thrush, Turdus philomelos	Turdidae	
5825	(97c)	Red Junglefowl, Gallus gallus	Phasianidae	
5826	(97c)	Wild Turkey, Meleagris gallopavo	Phasianidae	
5827	(97c)	Northern Lapwing, Vanellus vanellus	Charadriidae	
5828	(97c)	Emu, Dromaius novaehollandiae	Casuariidae	
GUIN	EA	2019 December 11 (Sea Birds) Set/4, SS/1		A*
N/A	12,500	fr European Shag, Phalacrocorax aristotelis	Phalacrocoracidae	9
N/A	12,500	ofr Black-browed Albatross, Thalassarche melanophris	Diomedeidae	
N/A	12,500	fr Northern Fulmar, Fulmarus glacialis	Procellariidae	
N/A	12,500	fr Blue-footed Booby, Sula nebouxii	Sulidae	
N/A	50,000	ofr SS Atlantic Puffin, Fratercula arctica	Alcidae	
Margii	1	Thick-billed Murre, Uria aalge (LR)	Alcidae	
		Wandering Albatross, Diomedea exulans (UR)	Diomedeidae	
JAPA]	N	2020 February 7 (Miyakojima Tourist Attraction	ons) Set/5	A*
4375b		Ruddy Kingfisher, <i>Halcyon coromanda</i>	Alcedinidae	
		2020 June 10 (Flora and fauna of Iriomote Islan	nd) Set/10	A*
4404a	84¥	Crested Serpent Eagle, Spilornis cheela	Accipitridae	
4404b	84¥	Ruddy Kingfisher, Halcyon coromanda	Alcedinidae	
4404c	84¥	Ryukyu Scops-Owl, Otus elegans	Strigidae	
		2020 July 17 (Protection of Historic Sites and National Monur	nents) Set/10	A*
4411j	84¥	Oriental Stork, Ciconia boyciana	Ciconiidae	
		2020 June 19 (Traditional Colors) Shee	et/10 S/A	A*
4407h	63¥	Common Kingfisher, Alcedo atthis	Alcedinidae	
LATV	TA	2020 June 19 Set/2		A*
	€1.27	Hazel Grouse, Tetrastes bonasia	Phasianidae	
1053	€2.14	Common Kingfisher, <i>Alcedo atthis</i>	Alcedinidae	
		ISLANDS 2019 May 22 (Sacred Kingfisher) Set/4,		A*
		Sacred Kingfisher, <i>Todiramphus sanctua</i>	Alcedinidae	
		(Facing left, dark background)		
1239b	\$2.00			
1239c	\$2.00	Same species, facing left, on branch, light background		
		Same species, facing left, legs not visible		
1240	\$5.00	SS Same species		
NAMI	IBIA	2019 April 25 (Cuckoos) Se	t/4	A *
		African Cuckoo, Cuculus gularis	Cuculidae	11
1200	(ψυ. 10	(Inscribed "Postcard Rate")	- avairanv	
		(

NAM	IBIA (c	ontinue	ed)		
1387	(\$8.60)Dideri	c Cuckoo, <i>Chrysococcyx caprius</i> (Inscribed "Zone B")	Cuculidae	
1388	(\$32.0	0)	Jacobin Cuckoo, <i>Clamator jacobinus</i> (Inscribed "Registered Mail)	Cuculidae	
1389	(\$36.6	/	Great Spotted Cuckoo, Clamator glandarius ribed "Inland Registered Mail)	Cuculidae	
NETE	HERLA		2020 January 20 (Owls and Birds	of Prey") Set/10	A*
			y, Pandion haliaetus	Pandionidae	7.
	(91c)		ean Honey-Buzzard, <i>Pernis apivorus</i>	Accipitridae	
	(91c)	-	Kite, Milvus milvus	Accipitridae	
	(91c)		eared Owl, Asio flammeus	Strigidae	
	(91c)		igu's Harrier, Circus pygargus	Accipitridae	
	(91c)		non Kestrel, Falco tinnunculus	Falconidae	
1601g	(91c)	Hen F	Harrier, Circus cyaneus	Accipitridae	
1601h	(91c)	Eurasi	an Hobby, Falco subbuteo	Falconidae	
1601i	(91c)	Long-	eared Owl, Asio otus	Strigidae	
1601j	(91c)	White	-tailed Eagle, Haliaeetus albicilla	Accipitridae	
NORV	WAY		2019 April 11 (Europa) Single		A*
1868	(21k)	White	-throated Dipper, Cinclus cinclus	Cinclidae	
PALA	U		2018 December 19 (Beautiful Birds) Shee	t/6, sheet/4, SS/1	A*
1404a	\$0.25	Scaly-	breasted Munia, Lonchura punctulata	Estrildidae	
		-	Nutmeg Mannikin, which was renamed to the Curre	ent name)	
1404b		_	legged Crake, Rallina eurizonoides	Rallidae	
1404c	\$0.75	Red-le	egged Crake, Rallina fasciata	Rallidae	
1404d	\$1.00	Weste	rn Yellow Wagtail, Motacilla flava	Motacillidae	
			ar Pigeon, Caloenas nicobarica	Columbidae	
1404f	\$2.00	Palau	Flycatcher, Myiagra erythrops	Monarchidae	
1405a	\$.50	Buff-l	oanded Rail, Gallirallus philippensis	Rallidae	
1405b	\$1.00	Micro	nesian Myzomela, Myzomela rubratra	Meliphagidae	
1405c	\$2.00	Same	species		
1405d	\$3.00	Same	species as \$.50 value		
1406	\$4.00	SS	Caroline Islands White-eye, Zosterops semperi	Zosteropidae	
ROM	ANIA		2020 May 22 (Pheasants)	Set/4 + label	A*
6420	1.901	Golde	n Pheasant, Chrysolophus pictus	Phasianidae	
6421	51	Lady .	Amherst's Pheasant, Chrysolophus amherstiae	Phasianidae	
6422	8.501	Reeve	s's Pheasant, Syrmaticus reevesii	Phasianidae	
6423	121	Ring-1	necked Pheasant, Phasianus colchicus	Phasianidae	
SIER	RA LEC	ONE	2020 January 30 (Owls) So	et/5, SS/2	A*
N/A	10,000		Little Owl, Athene noctua	Strigidae	
N/A	10,000		Barn Own, Tyto alba	Tytonidae	
N/A	10,000		Long-eared Owl, Asio otus	Strigidae	
				=	

SIERRA LEONE (continued)

N/A	20,000le	Snowy Owl, Bubo scandiacus	Strigidae	
	Label	Long-eared Owl, Asio otus	Strigidae	
N/A	20.000le	Great Gray Owl, Strix nebulosa	Strigidae	
N/A	20,000le	SS Snowy Owl, Bubo scandiacus (LS)	Strigidae	
N/A	20,000le	SS Great Gray Owl, Strix nebulosa (RS)	Strigidae	
	Margin	Great Horned Owl, Bubo virginianus	Strigidae	
		2020 January 30 (Endang	gered Species) Set/5	A*
N/A	20,000le	Galapagos Penguin, Spheniscus mendiculus	Spheniscidae	
N/A	20,000le	SS Same species (RS) as on the sheet of five	Spheniscidae	
UZBE	KISTAN	2020 February 5 (Bird ty	pe of 2017) Set/2	A*
880	1600s C	ommon Quail, Coturnix coturnix	Phasianidae	
881	3200s Eu	urasian Magpie, Pica pica	Corvidae	

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

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

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



New Birds in the Philatelic Aviary

By Charles E. Braun, BU 1364

New Birds



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

Length: 4 inches, sexes alike, resident. A carnivorous bird descendant of Archaeopteryx, the earliest bird. It was the first bird with a perching foot. Habitat: Dense forest.

Range: Spain.

Reference: Sanz, J. L and J. F. Bonaparte. Unusual Early Cretaceous Bird.

Nature vol 331, pages 433-435 (1988).



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

Length: 5 feet, sexes alike, resident. A huge 1100-pound, 10-foot-tall flightless bird with a long beak. Habitat: Subtropical open woodlands. Range: Northern Australia.

Reference: Rich, P. The Dromornithidae, Geology and Geophysics, vol 184, pages 1-196.



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

Length: 11 feet, 6 inches, sexes alike, resident. The largest flying bird, with a wingspan of 23 feet.

Habitat: Open country.

Range: Central and northwestern Argentina.

Reference: Alexander, David E. Proceedings of the National Academy of

Sciences of the United States of America, vol 104, pages 12233 and 12234.

EMPEROR GOOSE, Anser canagicus Anatidae

Marshall Islands, 2020, not yet cataloged, \$1.50 Previously on a US duck stamp.

Length: 26 to 38 inches, sexes alike, migratory. Black, with a white hindneck and \$1.50 tail.

Habitat: Breeds in open Arctic tundra near water; winters along coasts.

Range: Breeds in northeastern Siberia and western Alaska; winters in northern Pacific coasts.

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



WESTERN PLANTAIN-EATER, Crinifer piscitor Muscophagidae



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

Length: 20 inches (10-inch tail), sexes alike, resident. Gray above and streaked white below, with a dark brown head and upper breast and a yellow bill.

Habitat: Open wooded savanna and cultivation.

Range: Senegal to the Central African Republic and the Congo River.

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

the World, Volume 4.

CROZET SHAG, Phalacrocorax melanogenis Phalacrocoracidae

French Antarctic Territory, 2021, not yet cataloged, 1 euro

Length: 24 inches, sexes alike, resident. Black above and white below, with white wing patches.

Habitat: Marine, near coasts.

Range: Crozet Island and Prince Edward Island, southern Indian Ocean.

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

the World, Volume 1.



South Africa, 2020, not yet cataloged, international small letter

Length: 8 to 9 inches, resident. The male (shown on the stamp) is yellow-spotted green above and dark-spotted white below, with a red crown and mustache; the female has a red nape and a black mustache.

Habitat: Forest, woodland and scrub.

Range: Southern South Africa.

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

the World, Volume 7.

OLIVE WOODPECKER, Chloropicus griseocephalus Picidae

South Africa, 2020, not yet cataloged, international small letter

Length: 8 inches, resident. The male (shown on the stamp) is dull olive-green above and bronze-olive below, with a red crown and belly patch.; the female has a gray crown.

Habitat: Forest and bushes.

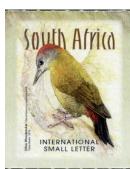
Range: Angola and Namibia to northern Malawi and southern and western South

Africa.

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







HAMMOND'S FLYCATCHER, Empidonax hammondii Tyrannidae



Grenada, 2020, not yet cataloged, \$14

Length: 5 to 6 inches, sexes similar, migratory. Grayish-olive above and grayish below, with two white wingbars and a white eyering.

Range: Breeds from east-central Alaska to north-central New Mexico; winters from southern Arizona to north-central Nicaragua.

Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 9.

REUNION CUCKOOSHRIKE, *Lalage newtoni* Campiphagidae France, 2021, not yet cataloged, 1.08 euros

Length: 9 inches, resident. The male (shown on the stamp) is ashy-gray above and pale gray below; the female is rusty-brown above and finely barred whitish below with a narrow white eyebrow.

Habitat: Canopy of closed montane moist forest.

Range: Northwestern Reunion Island, southern Indian Ocean.

Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 10.



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

Length: 4 inches, resident. The male (shown on the stamp) is black above and white below, with a white wing stripe and a black breastband: the female has a gray breastband.

Habitat: Forest edge.

Range: Southern Cameroon and Gabon to the Central African Republic. Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the

Birds of the World, Volume 11.



RUFOUS-BACKED FANTAIL, Rhipidura rufidorsa Rhipiduridae



Solomon Islands, 2020, not yet cataloged, \$9.00

Length: 5 inches, sexes alike, resident. Rufous above and mottled gray below, with a gray head and nape and a whitish throat.

Habitat: Forest interior.

Range: New Guinea.

Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 11.

BRONZED DRONGO, Dicrurus aeneus Dicruruidae

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

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

Habitat: Forest and woodlands.

Range: India to Taiwan and Borneo.

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

of the World, Volume 14.





GLOSSY DRONGO, Dicrurus divaricatus Dicruridae

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

Length: 9 inches, sexes similar, resident. Glossy black, with a forked tail.

Habitat: Forest and woodlands.

Range: Senegal to Eritrea, Somalia, and western Kenya.

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

the World, Volume 14.

CAMBODIAN TAILORBIRD, Orthotomus chakormuk Cisticolidae

Cambodia, 2020. not yet cataloged, 2000 r



Length: 4 inches, resident. The male (shown on the stamp) is slate gray above and white below, with an orange crown and patchy black throat: the female lacks the black throat.

Habitat: Dense scrub.

Range: Southeastern Cambodia.

Reference: Mahood, S. J., et al. Forktail. vol 29, pages 1-14.

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

Length: 7 inches, sexes similar, resident. Dark rusty brown above and light yellow to cream below, with a yellow supercilium and a black eyestripe.

Habitat: Mangroves and marshes.

Range: Pagan Island, Marianas.

Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 11.

HONEYGUIDE GREENBUL, Baeopogon indicator Pycnonotidae



Togo. 2020, not yet cataloged, 800 fr

Length: 8 inches, resident. The male (shown on the stamp) is greenisholive above and olive gray below, with pale eyes, creamy belly and white outer tail; the female has brown eyes.

Habitat: Forest, forest patches and plantations.

Range: Western Guinea to western Kenya and northern Angola.

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

Birds of the World, Volume 10.

BOOTED WARBLER, Iduna caligata Sylviidae

Djibouti, 2020, not yet cataloged, 250 fr

Length: 5 inches, sees alike, migratory. Grayish-brown above and off-white below, with a whitish supercilium.

Habitat: Breeds in low scrub, bushes and weeds; winters in taller vegetation and bushes.

Range: Breeds from western Russia to northwestern China; winters in eastern India.

Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 11.





REPUBLIQUE DE DJIBOL



BRONZE-TAILED GLOSSY STARLING, *Lamprotornis chalcurus* Sturnidae

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

Length: 8 inches, sexes alike, resident. Iridescent blue-green above and purple below, with purple ear-patches and epaulets.

Habitat: Woodland, bushes and cultivated areas.

Range: Senegal to western Kenya.

Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 14.

FOREST ROBIN, Stiphornis erythrothorax

Muscicapidae

Central African Republic, 2020, not yet cataloged, 3300 fr

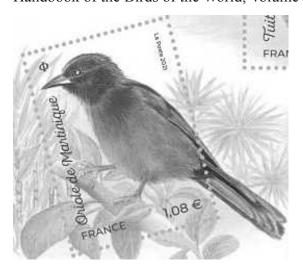
Length: 5 inches, sexes similar, resident. Slate gray above and white below, with a bright orange breast and a white spot in front of the eye.

Habitat: Forest.

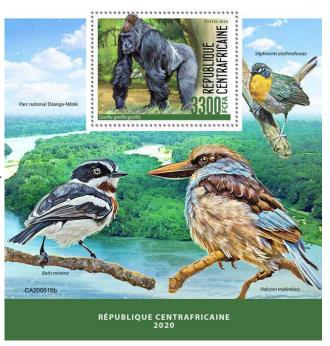
Range: Sierra Leone to northeastern Gabon and

southern Uganda.

Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 10.



30^E ANNIVERSAIRE DU PARC NATIONAL DZANGA-NDOKI



MARTINIQUE ORIOLE, Icterus bonana Icteridae

France, 2021, not yet cataloged, €1.08

Length: 7 to 8 inches, sexes similar, resident. Black above and orange-tawny below, with a dark chestnut head and breast and orange-tawny epaulets.

Habitat: Dry forest and mangroves. Range: Martinique, central Antilles.

Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 16.



HERPETOLOGY

Editor Dick Roman, LM 83



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

New issues

Scott# Denom Commonname/Scientific	Name 2019 May 11 (Protected Species)	Family/Subfamily Co	de
1786b 25d Unidentified cobra	2017 May 11 (110tected Species)		
ANTIGUA	2020 January 15 (American Croc	codiles)	
3563a \$4.00 American crocodile,	•	Crocodylidae	A
3563b \$5.50 Same species			
3563c \$6.00 Same species			
3563d \$6.50 Same species			
AUSTRALIA	2020 May 19 (Citizen science)		
5148 \$1.10 stylized frog			
5152 \$1.10 same species			
	2020 August 4 (Wildlife Recovery	y) Set/6	
5174 \$1.10 Davies' tree frog,	Litoria daviesae	Hylidae, Hylinae	A
	mp-skink, Eulamprus leuraensis	Scincidae, Sphenomorphinae	A
5178a SS \$1.10 Same species			
5180 \$1.10 Davies' tree frog, <i>L</i> .		Hylidae, Hylinae	A
5180a Booklet of 10 same s	•		
	mp-skink, Eulamprus leuraensis	Scincidae, Sphenomorphinae	A
5183a Booklet of 10 same s	-		
5100 0110 5 1 1 1 1 1	2020 September 7 (Watertower A		
5198 \$1.10 Eastern bearded drag	·	Agamidae, Amphibolurinae	A
5199a \$1.10 booklet of 10 same sp			
5202 61 10 5 4 1 1 1 1	S/A die cut 11¼	A '1 A 1'1 1 '	
5202 \$1.10 Eastern bearded drag		Agamidae, Amphibolurinae	А
5202a \$1.10 Booklet of 10 same s	pecies		
BELGIUM	2020 August 31 (Animals) Set		
2924 1 (98c) Green Frog, Rana		Ranidae	A
2927a Block of 10, #2918-2	7		
BHUTAN	2020 February 7 (New Year 2020	Year of the Rat)	
1609f 30nu zodiac stylized snake			
CARIBBEAN NETHERLANDS			
Inscribed "Bonaire"	2020 July 1 (Marine Life) Set/	5	
Horiz strip of 5			

122b 75c Inscribed "S	AN NETHERLANDS (continued) Green Sea Turtle, Chelonia mydas Saba" 2020 July 1 (Marine Life) Set extrip of 5	Cheloniidae, Cheloniinae	A
123e 75c Inscribed "S	Leatherback Sea Turtle, <i>Dermochelys coriacea</i> St. Eustatius'' 2020 July 1 (Marine Life) Set extrip of 5	Dermochelyidae /5	A
124d 75c	Hawksbill Sea Turtle, Eretmochelys imbricata	Cheloniidae	A
CHRISTMA 592k \$1	AS ISLAND 2020 Jauary 8 (Year of the rat) Stylized zodiac snake	Single	В
500 to 20	2020 October 30 (Christmas)	Set/2, SS/2 x2	D
	O Stylized giant geckos enir sheet of 2 #598-99		В
	Stylized giant geckos elet pane of 5		В
COLOMBI			
1	South American River Turtle, Podocnemis expansa	Podocnemididae	A
CUBA	2019 June 5 (Animals and Land		
6167 65c 6169 2.05p	Cuban Brown Curlytail, <i>Leiocephalus cubensis</i> Oriente Mottled Frog, <i>Eleutherodactylus simulans</i>	Brachycephalidae	A A
FRANCE	2019 November 9 (Tromelin Island, Fren	nch and Antarctic Terr) Single	_
5760 €1.30	Unidentified turtle 2020 February 7 (Animals and their refl	ections in Water) Set/12	В
5791 97c	Common Green Frog, Hylarana erythraea	Ranidae	A
5794a 97c	Same species		
GRENADA	•		
4348a \$4 4348b \$4	Satanic leaf-tailed gecko, <i>Uroplatus phantasticus</i> Reunion Chameleon, Panther chameleon, <i>Furcifer pa</i>	Gekkonidae	A A
			A
3029a \$2	GRENADINES 2019 December 24 (Lizards) Gold Dust Day Gecko, <i>Phelsuma laticauda</i>	Set/4, SS/1 Gekkonidae	A
3029a \$2	Turks and Caicos Rock Iguana, Cyclura carinata	Iguanidae, Iguania	A
3029a \$4	Gold Dust Day Gecko, Phelsuma laticauda	Gekkonidae	A
3029a \$5	Turks and Caicos Rock Iguana, Cyclura carinata	Iguanidae, Iguania	A
3030 \$14	Desert spiny lizard, Sceloporus magister	Phrynosomatidae, Sceloporinae	A
INDIA	2019 December 26 (Directorate of Reven	nue Intelligence) Single	
3199 5r	Unidentified turtle, stylized		
JAPAN	2020 February 7 (Tourist Attract	ions) Set/10	
4375 4375e 84¥	Sheet of 5 Green Sea Turtle, <i>Chelonia mydas</i> 2020 June 10 (Flora and Fauna of	Cheloniidae, Cheloniinae of Iriomote Island) Set/10	A
4404	Sheet of 10		
4404e 84¥	Indochinese Box Turtle, Cuora galbinifrons	Geoemydidae	A

MAC	AO	2020 October 9 (Protected animals)	Set/4, SS/1	
1614c	4.50p	Hawksbill Sea Turtle, Eretmochelys imbricata	Cheloniidae	A
1615	13p	Same species		
MEXI	(CO	2020 (Folk Art, type of 2005)	Set/13	
3168	7.50p	Obsidian and opal turtle statue		A
ROM	ANIA	2020 January 23 (Year of the Rat)	Set/1, SS/1	
6374	28.501	Stylized zodiac snake		B SS Z
		2020 July 2 (Spotted animals)	Set/4 plus labels	
6438	1.901	Leopard Tortoise, Stigmochelys pardalis	Testudinidae	A
6438a		Sheet of 5 with label		
6441	12.001	European Ratsnake, Zamenis situla	Colubridae, Colul	orinae A
6441a		Sheet of 5 with label		
0 1 3 7 6		0040 4 0 70 11 11 10 10 11		
SAM(JA	2018 April (Scott #1073 surcharged)	Set/5	
		90s Stylized turtle	Set/5	A
	50s on	- ,	Set/5	A
1289	50s on	90s Stylized turtle	Set/5	A
1289 SYRI	50s on	90s Stylized turtle 2019 (Decorated Urn) Set/6	Set/5	A
1289 SYRI 1805	50s on A £5	90s Stylized turtle 2019 (Decorated Urn) Set/6 Stylized lizard on vase	Set/5	A
1289 SYRI 1805 1806	50s on A £5 £10	90s Stylized turtle 2019 (Decorated Urn) Set/6 Stylized lizard on vase Same species	Set/5	A
1289 SYRI 1805 1806 1807	50s on A £5 £10 £25	90s Stylized turtle 2019 (Decorated Urn) Set/6 Stylized lizard on vase Same species Same species	Set/5	A
1289 SYRI 1805 1806 1807 1808	50s on £5 £10 £25 £50	90s Stylized turtle 2019 (Decorated Urn) Set/6 Stylized lizard on vase Same species Same species Same species Same species	Set/5	A
1289 SYRIA 1805 1806 1807 1808 1809 1810	50s on A £5 £10 £25 £50 £100	90s Stylized turtle 2019 (Decorated Urn) Set/6 Stylized lizard on vase Same species Same species Same species Same species Same species	Set/5	A
1289 SYRIA 1805 1806 1807 1808 1809 1810	50s on £5 £10 £25 £50 £100 £155	90s Stylized turtle 2019 (Decorated Urn) Set/6 Stylized lizard on vase Same species	Set/5 Dermochelyidae	A
1289 SYRIA 1805 1806 1807 1808 1809 1810 THAI 3080	50s on £5 £10 £25 £50 £100 £155 LAND 3b	90s Stylized turtle 2019 (Decorated Urn) Set/6 Stylized lizard on vase Same species Same species	Dermochelyidae	



ICHTHYOLOGY

Editor

J. Dale Shively, BU 1832



New Listings

Scott# Denom Common Name/Scientific Name ANDORRA (French Admin.) 2020 June 19 (Oncorhynchus mykis	Family/Subfamily (s) Single	Code
822 €1.16 Rainbow Trout, <i>Oncorhynchus mykiss</i> (w/skeletonized	,	ae A
AUSTRALIA 2020 May 19 (Citizen Science) Single/Bklt/10 & S 5149 \$1.10 LR: Ngukurr Wi Stadi Bla Kantri ("We study the country") s		UBS
No Sc# (Sc# 5148-5151) (SS/1) (2020 Yearbook Exclusive) No Sc# (Sc# 5149) (Commemorative Stamp Pack) w/same design	in packet background	II D C
5153 \$1.10 (Sc# 5149) Serpentine die cut 11¼ syncopate 5153a Bklt/10		UBS
2020 September 7 (Art on Water Towers) Single, S	SS/4 & Bklt/10, Perf. 14	$\frac{3}{4}$ x14
5196 \$1.10 Jenny McCracken, "Lucky Dip" with duck diving for U/I	fish (LL)	C
5196a SS/4 (Sc# 5196-5199, 1 ea)		C
5200 (Sc# 5196, Bklt) Serpentine die cut 11¼ syncopate 5200a Bklt/10		С
BHUTAN 2020 February 7 (New Year 2020 -	Year of the Rat) SS/1	
1610 Margin R: Stylized fish	,	SZ
BOSNIA & HERZEGOVINA 2019 December 5 (Fish)	Strip/4 & Blk/4	
NOTE: Sc# 631 printed in sheets of 8 stamps; two tete-beche strips. Marg	gins contain tail fin/barb	el
extensions of each species of the 4 species 631(a-d).		
631a 90pf Barbel, Barbus barbus	Cyprinidae	A
631b 90pf European Perch, Perca fluviatilis	Percidae	A
631c 90pf Pike-perch, Sander lucioperca	Percidae	A
631d 90pf Wels catfish, Silurus glanis	Siluridae	A
Margin Sheet/8 UL/UR/LR/LL: Fins/barbels of each species Stylized fish	s 631(a-b)	
BRAZIL 2017 November 10 (Characters from "The Steadfast Tin Soldie 3369d 1.85r Stylized fish	er" H. C. Andersen) Str	ip/4 X
CARIBBEAN NETHERLANDS 2020 July 1 (Marine Life) 122 Strip/5 Sc# 122 a-e	Horiz. Strip/5	
122c 75c Lionfish, Pterois sp.	Scorpaenidae	A
122e 75c Parrotfish sp.	Scaridae	A
123 Strip/5 Sc# 123 a-e		
123a 75c Blue Tang Surgeonfish, Acanthurus coeruleus	Acanthuridae	A

CARIBBEA	N NETHERLANDS (continued)		
123c 75c	French Angelfish, Pomacanthus paru	Pomacentridae	A
123d 75c	Grey Reef Shark, Carcharhinus amblyrhynchos	Carcharhinidae	A
124 Strip	'5 Sc# 124 a-e		
124a 75c	Stingray sp.	Dasyatidae	A
124b 75c	Coney, Cephalopholis fulva	Serranidae	A
124c 75c	Great Barracuda, Sphyraena barracuda	Sphyraenidae	A
124e 75c	Yellowfin Tuna, Thunnus albacares	Scombridae	A
CHINA (Tai	wan) 2020 February 26 (Carassius (Goldfish) variants) Set/4	
4523 \$6	Red Crane Crest Oranda, Carassius auratus	Cyprinidae	A
4524 \$9	Ranchu, Carassius auratus	Cyprinidae	A
4525 \$15	Broadtail Ryukin, Carassius auratus	Cyprinidae	A
4526 \$17	Pompons, Carassius auratus	Cyprinidae	A
COLOMBI	A 2020 June 6 (Columbian Parks, Malpel Flora and Fauna	a Sanctuary) Sheet/	9
1539g 500p	, 1	Sphyrnidae	A
uncanceled. News, 2020 1177 10c on	ANDS 1998? (Marine Life, Sc# 1158 & 1161 Co discovered ovpt. Year of issue is unknown. A damaged example Sc# 1158 & 1161 are like Sc# 1062 & 1065 printed in 1992-94. Sc# December 21, p.56). 15c Black & Gold Angelfish (Bicolor Angelfish), Centropyge b 25c Black-tipped Cod (Blacktip Grouper), Epinephelus fasciatus	of Sc# 1178 exists See article in Linn's icolor Pomacanthic	Stamp
COSTA RIC	,	Horiz. Strip/4	
COSTA RIO RA138a	70col Whale shark, Rhincodon typus	Horiz. Strip/4 Rhincodontidae	A
COSTA RIC RA138a RA138b	70col Whale shark, <i>Rhincodon typus</i> 70col Scalloped Hammerhead, <i>Sphyrna lewini</i>	Horiz. Strip/4 Rhincodontidae Sphyrnidae	A
COSTA RIC RA138a RA138b RA138c	70col Whale shark, <i>Rhincodon typus</i> 70col Scalloped Hammerhead, <i>Sphyrna lewini</i> 70col Giant Manta, <i>Mobula birostris</i>	Horiz. Strip/4 Rhincodontidae Sphyrnidae Myliobatidae	A A
COSTA RIC RA138a RA138b	70col Whale shark, <i>Rhincodon typus</i> 70col Scalloped Hammerhead, <i>Sphyrna lewini</i>	Horiz. Strip/4 Rhincodontidae Sphyrnidae	A
COSTA RIC RA138a RA138b RA138c	70col Whale shark, <i>Rhincodon typus</i> 70col Scalloped Hammerhead, <i>Sphyrna lewini</i> 70col Giant Manta, <i>Mobula birostris</i> 70col Common Sawfish, <i>Pristis pristis</i>	Horiz. Strip/4 Rhincodontidae Sphyrnidae Myliobatidae	A A
COSTA RIC RA138a RA138b RA138c RA138d DJIBOUTI 1880c 250fa	70col Whale shark, <i>Rhincodon typus</i> 70col Scalloped Hammerhead, <i>Sphyrna lewini</i> 70col Giant Manta, <i>Mobula birostris</i> 70col Common Sawfish, <i>Pristis pristis</i> 2019 December 12 (Kingfishers) Sh Pied Kingfisher, <i>Ceryle rudis</i> with U/I fish	Horiz. Strip/4 Rhincodontidae Sphyrnidae Myliobatidae Pristidae	A A A U C
COSTA RIC RA138a RA138b RA138c RA138d DJIBOUTI 1880c 250fa	70col Whale shark, <i>Rhincodon typus</i> 70col Scalloped Hammerhead, <i>Sphyrna lewini</i> 70col Giant Manta, <i>Mobula birostris</i> 70col Common Sawfish, <i>Pristis pristis</i> 2019 December 12 (Kingfishers) Sh Pied Kingfisher, <i>Ceryle rudis</i> with U/I fish in Cerulean Kingfisher, <i>Alcedo coerulescens</i> with U/I fish	Horiz. Strip/4 Rhincodontidae Sphyrnidae Myliobatidae Pristidae	A A A
COSTA RIC RA138a RA138b RA138c RA138d DJIBOUTI 1880c 250fi 1890 Marg	70col Whale shark, <i>Rhincodon typus</i> 70col Scalloped Hammerhead, <i>Sphyrna lewini</i> 70col Giant Manta, <i>Mobula birostris</i> 70col Common Sawfish, <i>Pristis pristis</i> 2019 December 12 (Kingfishers) Sh Pied Kingfisher, <i>Ceryle rudis</i> with U/I fish in Cerulean Kingfisher, <i>Alcedo coerulescens</i> with U/I fish 2019 December 12 (Aquatic Birds) Sh	Horiz. Strip/4 Rhincodontidae Sphyrnidae Myliobatidae Pristidae	A A A U C U C
COSTA RIC RA138a RA138b RA138c RA138d DJIBOUTI 1880c 250fi 1890 Marg	70col Whale shark, Rhincodon typus 70col Scalloped Hammerhead, Sphyrna lewini 70col Giant Manta, Mobula birostris 70col Common Sawfish, Pristis pristis 2019 December 12 (Kingfishers) Sh Pied Kingfisher, Ceryle rudis with U/I fish in Cerulean Kingfisher, Alcedo coerulescens with U/I fish 2019 December 12 (Aquatic Birds) Sh Eastern Great Egret, Ardea alba modesta with U/I fish	Horiz. Strip/4 Rhincodontidae Sphyrnidae Myliobatidae Pristidae eet/4, SS/1	A A A U C
COSTA RIO RA138a RA138b RA138c RA138d DJIBOUTI 1880c 250fi 1890 Marg	70col Whale shark, <i>Rhincodon typus</i> 70col Scalloped Hammerhead, <i>Sphyrna lewini</i> 70col Giant Manta, <i>Mobula birostris</i> 70col Common Sawfish, <i>Pristis pristis</i> 2019 December 12 (Kingfishers) Share Pied Kingfisher, <i>Ceryle rudis</i> with U/I fish in Cerulean Kingfisher, <i>Alcedo coerulescens</i> with U/I fish 2019 December 12 (Aquatic Birds) Share Eastern Great Egret, <i>Ardea alba modesta</i> with U/I fish 2019 December 12 (Fish) Sheet/4, S	Horiz. Strip/4 Rhincodontidae Sphyrnidae Myliobatidae Pristidae eet/4, SS/1 eet/4, SS/1	A A A U C U C
COSTA RIC RA138a RA138b RA138c RA138d DJIBOUTI 1880c 250fi 1890 Marg 1882b 250fi 1884a 250fi	70col Whale shark, Rhincodon typus 70col Scalloped Hammerhead, Sphyrna lewini 70col Giant Manta, Mobula birostris 70col Common Sawfish, Pristis pristis 2019 December 12 (Kingfishers) Sh Pied Kingfisher, Ceryle rudis with U/I fish in Cerulean Kingfisher, Alcedo coerulescens with U/I fish 2019 December 12 (Aquatic Birds) Sh Eastern Great Egret, Ardea alba modesta with U/I fish 2019 December 12 (Fish) Sheet/4, Sh Cockatoo Cichlid, Apistogramma cacatuoides	Horiz. Strip/4 Rhincodontidae Sphyrnidae Myliobatidae Pristidae eet/4, SS/1 eet/4, SS/1 S/1 Cichlidae	A A A U C U C
COSTA RIC RA138a RA138b RA138c RA138d DJIBOUTI 1880c 250fi 1890 Marg 1882b 250fi 1884a 250fi 1884b 250fi	70col Whale shark, Rhincodon typus 70col Scalloped Hammerhead, Sphyrna lewini 70col Giant Manta, Mobula birostris 70col Common Sawfish, Pristis pristis 2019 December 12 (Kingfishers) Sh Pied Kingfisher, Ceryle rudis with U/I fish in Cerulean Kingfisher, Alcedo coerulescens with U/I fish 2019 December 12 (Aquatic Birds) Sh Eastern Great Egret, Ardea alba modesta with U/I fish 2019 December 12 (Fish) Sheet/4, Sh Cockatoo Cichlid, Apistogramma cacatuoides Emperor Angelfish, Pomacanthus imperator	Horiz. Strip/4 Rhincodontidae Sphyrnidae Myliobatidae Pristidae eet/4, SS/1 eet/4, SS/1 S/1 Cichlidae Pomacanthidae	A A A U C U C U C
COSTA RIC RA138a RA138b RA138c RA138d DJIBOUTI 1880c 250fi 1890 Marg 1882b 250fi 1884a 250fi 1884b 250fi 1884c 250fi	70col Whale shark, Rhincodon typus 70col Scalloped Hammerhead, Sphyrna lewini 70col Giant Manta, Mobula birostris 70col Common Sawfish, Pristis pristis 2019 December 12 (Kingfishers) Sh Pied Kingfisher, Ceryle rudis with U/I fish in Cerulean Kingfisher, Alcedo coerulescens with U/I fish 2019 December 12 (Aquatic Birds) Sh Eastern Great Egret, Ardea alba modesta with U/I fish 2019 December 12 (Fish) Sheet/4, Sh Cockatoo Cichlid, Apistogramma cacatuoides Emperor Angelfish, Pomacanthus imperator Palette Surgeonfish, Paracanthurus hepatus	Horiz. Strip/4 Rhincodontidae Sphyrnidae Myliobatidae Pristidae eet/4, SS/1 eet/4, SS/1 S/1 Cichlidae Pomacanthidae Acanthuridae	A A A U C U C U C
COSTA RIC RA138a RA138b RA138c RA138d DJIBOUTI 1880c 250fi 1890 Marg 1882b 250fi 1884a 250fi 1884b 250fi 1884c 250fi 1884d 250fi	70col Whale shark, Rhincodon typus 70col Scalloped Hammerhead, Sphyrna lewini 70col Giant Manta, Mobula birostris 70col Common Sawfish, Pristis pristis 2019 December 12 (Kingfishers) Sh Pied Kingfisher, Ceryle rudis with U/I fish in Cerulean Kingfisher, Alcedo coerulescens with U/I fish 2019 December 12 (Aquatic Birds) Sh Eastern Great Egret, Ardea alba modesta with U/I fish 2019 December 12 (Fish) Sheet/4, Sh Cockatoo Cichlid, Apistogramma cacatuoides Emperor Angelfish, Pomacanthus imperator Palette Surgeonfish, Paracanthurus hepatus Copperband Butterflyfish, Chelmon rostratus	Horiz. Strip/4 Rhincodontidae Sphyrnidae Myliobatidae Pristidae eet/4, SS/1 eet/4, SS/1 S/1 Cichlidae Pomacanthidae Acanthuridae Chaetodontidae	A A A U C U C U C
COSTA RIC RA138a RA138b RA138c RA138d DJIBOUTI 1880c 250fi 1890 Marg 1882b 250fi 1884a 250fi 1884b 250fi 1884c 250fi 1884d 250fi 1884d 250fi 1884d 250fi	70col Whale shark, Rhincodon typus 70col Scalloped Hammerhead, Sphyrna lewini 70col Giant Manta, Mobula birostris 70col Common Sawfish, Pristis pristis 2019 December 12 (Kingfishers) Sh Pied Kingfisher, Ceryle rudis with U/I fish in Cerulean Kingfisher, Alcedo coerulescens with U/I fish 2019 December 12 (Aquatic Birds) Sh Eastern Great Egret, Ardea alba modesta with U/I fish 2019 December 12 (Fish) Sheet/4, Sh Cockatoo Cichlid, Apistogramma cacatuoides Emperor Angelfish, Pomacanthus imperator Palette Surgeonfish, Paracanthurus hepatus Copperband Butterflyfish, Chelmon rostratus Clown Anemonefish, Amphiprion ocellaris	Horiz. Strip/4 Rhincodontidae Sphyrnidae Myliobatidae Pristidae eet/4, SS/1 eet/4, SS/1 S/1 Cichlidae Pomacanthidae Acanthuridae Chaetodontidae Pomacentridae	A A A U C U C U C A A A A Z
COSTA RIC RA138a RA138b RA138c RA138d DJIBOUTI 1880c 250fi 1890 Marg 1882b 250fi 1884a 250fi 1884c 250fi 1884c 250fi 1884d 250fi Margin UR: 1894 1000	70col Whale shark, Rhincodon typus 70col Scalloped Hammerhead, Sphyrna lewini 70col Giant Manta, Mobula birostris 70col Common Sawfish, Pristis pristis 2019 December 12 (Kingfishers) Sh Pied Kingfisher, Ceryle rudis with U/I fish in Cerulean Kingfisher, Alcedo coerulescens with U/I fish 2019 December 12 (Aquatic Birds) Sh Eastern Great Egret, Ardea alba modesta with U/I fish 2019 December 12 (Fish) Sheet/4, Sh Cockatoo Cichlid, Apistogramma cacatuoides Emperor Angelfish, Pomacanthus imperator Palette Surgeonfish, Paracanthurus hepatus Copperband Butterflyfish, Chelmon rostratus Clown Anemonefish, Amphiprion ocellaris fr Broadbarred Firefish, Pterois antennata	Horiz. Strip/4 Rhincodontidae Sphyrnidae Myliobatidae Pristidae eet/4, SS/1 eet/4, SS/1 S/1 Cichlidae Pomacanthidae Acanthuridae Chaetodontidae Pomacentridae Scorpaenidae	A A A U C U C U C A A A A A A A S A S S
COSTA RIC RA138a RA138b RA138c RA138d DJIBOUTI 1880c 250fi 1890 Marg 1882b 250fi 1884a 250fi 1884c 250fi 1884c 250fi 1884d 250fi Margin UR: 1894 1000	70col Whale shark, Rhincodon typus 70col Scalloped Hammerhead, Sphyrna lewini 70col Giant Manta, Mobula birostris 70col Common Sawfish, Pristis pristis 2019 December 12 (Kingfishers) Sh Pied Kingfisher, Ceryle rudis with U/I fish in Cerulean Kingfisher, Alcedo coerulescens with U/I fish 2019 December 12 (Aquatic Birds) Sh Eastern Great Egret, Ardea alba modesta with U/I fish 2019 December 12 (Fish) Sheet/4, Sh Cockatoo Cichlid, Apistogramma cacatuoides Emperor Angelfish, Pomacanthus imperator Palette Surgeonfish, Paracanthurus hepatus Copperband Butterflyfish, Chelmon rostratus Clown Anemonefish, Amphiprion ocellaris fr Broadbarred Firefish, Pterois antennata in UL: Titan Triggerfish, Balistoides viridescens	Horiz. Strip/4 Rhincodontidae Sphyrnidae Myliobatidae Pristidae eet/4, SS/1 eet/4, SS/1 S/1 Cichlidae Pomacanthidae Acanthuridae Chaetodontidae Pomacentridae Scorpaenidae Balistidae	A A A U C U C U C A A A A Z A SS A SS Z
COSTA RIC RA138a RA138b RA138c RA138d DJIBOUTI 1880c 250fi 1890 Marg 1882b 250fi 1884a 250fi 1884c 250fi 1884c 250fi 1884d 250fi Margin UR: 1894 1000	70col Whale shark, Rhincodon typus 70col Scalloped Hammerhead, Sphyrna lewini 70col Giant Manta, Mobula birostris 70col Common Sawfish, Pristis pristis 2019 December 12 (Kingfishers) Sh Pied Kingfisher, Ceryle rudis with U/I fish in Cerulean Kingfisher, Alcedo coerulescens with U/I fish 2019 December 12 (Aquatic Birds) Sh Eastern Great Egret, Ardea alba modesta with U/I fish 2019 December 12 (Fish) Sheet/4, Sh Cockatoo Cichlid, Apistogramma cacatuoides Emperor Angelfish, Pomacanthus imperator Palette Surgeonfish, Paracanthurus hepatus Copperband Butterflyfish, Chelmon rostratus Clown Anemonefish, Amphiprion ocellaris fir Broadbarred Firefish, Pterois antennata in UL: Titan Triggerfish, Balistoides viridescens Top CTR: Yellowface Angelfish, Pomacanthus xanthometopor	Horiz. Strip/4 Rhincodontidae Sphyrnidae Myliobatidae Pristidae eet/4, SS/1 eet/4, SS/1 S/1 Cichlidae Pomacanthidae Acanthuridae Chaetodontidae Pomacentridae Scorpaenidae Balistidae Pomacanthidae	A A A U C U C U C A A A A A A A A A S A S S A S S C A S S C C C C
COSTA RIC RA138a RA138b RA138c RA138d DJIBOUTI 1880c 250fi 1890 Marg 1882b 250fi 1884a 250fi 1884c 250fi 1884c 250fi 1884d 250fi Margin UR: 1894 1000	70col Whale shark, Rhincodon typus 70col Scalloped Hammerhead, Sphyrna lewini 70col Giant Manta, Mobula birostris 70col Common Sawfish, Pristis pristis 2019 December 12 (Kingfishers) Sh Pied Kingfisher, Ceryle rudis with U/I fish in Cerulean Kingfisher, Alcedo coerulescens with U/I fish 2019 December 12 (Aquatic Birds) Sh Eastern Great Egret, Ardea alba modesta with U/I fish 2019 December 12 (Fish) Sheet/4, Sh Cockatoo Cichlid, Apistogramma cacatuoides Emperor Angelfish, Pomacanthus imperator Palette Surgeonfish, Paracanthurus hepatus Copperband Butterflyfish, Chelmon rostratus Clown Anemonefish, Amphiprion ocellaris fr Broadbarred Firefish, Pterois antennata in UL: Titan Triggerfish, Balistoides viridescens	Horiz. Strip/4 Rhincodontidae Sphyrnidae Myliobatidae Pristidae eet/4, SS/1 eet/4, SS/1 S/1 Cichlidae Pomacanthidae Acanthuridae Chaetodontidae Pomacentridae Scorpaenidae Balistidae Pomacanthidae	A A A U C U C U C A A A A Z A SS A SS Z

FAROE ISLANDS 2020 September 21 (Ludwig van Beethoven, 1770-1827) SS/1 760 Margin RT: Stylized fish (head facing RT)	ſ
FRANCE 2020 March 6 (Cabinet of Curiosities) Bklt/12 5804 97c Adriaen Van der Kabel (1631-1705), "Herring Fishing" (fish in net on skiff) 5810a Bklt/12 (Sc# 5799-5810)	1
GREAT BRITAIN Guernsey 2020 July 21 (Paintings) SS/6 1552 95p Richard Le Goupillot, "Fishing Boat" (mackerel sp. in net) Scombridae C S	·
GRENADA GRENADINES2019 December 24 (Saltwater Fish)SS/3 & SS13027a \$3Mandarinfish, Synchiropus splendidusCallionymidaeA3027b \$5Oscar, Astronotus ocellatusCichlidaeA3027c \$7Clown Triggerfish, Balistoides conspicillumBalistidaeA3028 \$3Lionfish sp.ScorpaenidaeA	
HONG KONG2020 August 18 (Ocean Park, Hong Kong Theme Park) Set/6, SS/12093a \$10 UR: Stylized SeahorseSyngnathidaeC S	
HUNGARY2020 August 5 (Flora and Fauna)Single4565d 185fo Pike-perch, Sander luciopercaPercidaeA	L
JAPAN 2020 January 15 (Food) Bklt/10 4366 Sheet of 10 B U 4366g 63¥ Sea bream on plate Sparidae B	
Mackerel on plate Scombridae B 2020 January 28 (National Parks) Sheet/10	i
4372 Sheet of 10 4372j 84¥ U/I fish at Kerama Shoto National Park 2020 February 7 (Hakodate Tourist Attractions) Sheet/5	ĺ
4374 Margin UR: Stylized tuna (2) LR: Stylized fish Scombridae A S	1
2020 February 7 (Miyakojima Tourist Attraction) Sheet/5	
4375 Sheet of 5 4375d 84¥ Clown Anemonefish (2), Amphiprion ocellaris Pomacentridae A 2020 May 20 (Doraemon Fishing) Bklt/10	
4398 Booklet of 10	
4398b 63¥ Doraemon (popular cartoonish earless robotic cat) w/ 2 stylized fish Yellowfin Tuna(?), <i>Thunnus albacares</i> Scombridae B 2020 June 16 (Items of Nihonbashi Business District of Tokyo) Sheet/10	j
4406 Sheet of 10 4406 Margin UL: Stylized fish (3) Perch sp.(?) Barracuda sp.(?) Flounder sp. Percidae A MS Z Sphyraenidae A MS Z Paralichthyidae A MS Z	,

JAPAN (continued)

2020 June 19 (Two Goldfish) Sheet/10

		2020 June 19 (Two Goldfish) Sheet/10		
4407	Sheet	of 10		
4407d	63¥	Stylized Goldfish (3)	Cyprinidae	A
		2020 July 1 (Fish – Sea Life Series No. 4	4) Sheet/10	
4409	Sheet	of 10		
4409	Margii	nTOP CTR/UL/UR: Blue-green Damselfish, Chromis viridis	Pomacentridae	A MS Z
		TOP CTR: Sapphire Devil, Chrysiptera cyanea	Pomacentridae	MS Z
		LR/LL: Clown Anemonefish (4), Amphiprion ocellaris	Pomacentridae	MS Z
	CTR:	Yellowface Angelfish juvenile (?), Pomacanthus xanthometopon	Pomacanthidae	A MS Z
		LT CTR: Pajama Cardinalfish (3), Sphaeramia nematoptera	Apogonidae	A MS Z
		LR: Longnose Hawkfish, Oxycirrhites typus	Cirrhitidae	A MS Z
4409a	84¥	Pacific Double-Saddle Butterflyfish, Chaetodon ulietensis	Chaetodontidae	\mathbf{A}
		Moorish Idol, Zanclus cornutus	Zanclidae	A
4409b	84¥	Blue-green Chromis (Blue-green Damselfish), Chromis viridis	Pomacentridae	A
4409c	84¥	Blue Devils (Sapphire Devil) (2), Chrysiptera cyanea	Pomacentridae	A
		Blue-green Chromis (Blue-green Damselfish), Chromis viridis	Pomacentridae	A
4409d	84¥	Blue Tang (Surgeonfish), Acanthurus coeruleus	Acanthuridae	A
4409e	84¥	Shepard's Angelfish (Mango Angelfish), Centropyge shepardi	Pomacentridae	A
		Yellow Tang, Zebrasoma flavescens	Acanthuridae	A
		Blue-green Chromis (Blue-green Damselfish), Chromis viridis	Pomacentridae	A
4409f	84¥	Moorish Idol (2), Zanclus cornutus	Zanclidae	A
4409g	84¥ Fo	orceps Butterflyfish (Yellow Longnose Butterflyfish) (2), Forcipiger long	girostris Chaetodo	ontidae A
4409h	84¥	Fire Goby, Nemateleotris magnifica (2 horiz.)	Gobiidae	A
4409i	84¥	Saddle Butterflyfish, Chaetodon ephippium	Chaetodontidae	A
		Yellow Boxfish, Ostracion cubicus	Ostraciidae	A
4409j	84¥Clo	ownfish (Anemonefish) (2 horiz. in anenome), Amphiprion		entridae A
		2020 July 8 (Ancient Tombs, UNESCO World Heritage Site, O	saka) Sheet/10	
4410	Margii	nLT/RT: U/I Stylized fish as part of border design		
KAZA	KHST	AN 2020 May 12 (Fish) Set/6		
918	5te	Caspian Anadromous Shad, Alosa kessieri (volgensis), refers to	range Clup	eidae A
919	10te	Sea Trout, Salmo trutta (caspius); refers to Caspian Basin	Salmonidae	A
920	20te	Taimen, Hucho taimen (aka Siberian Giant Trout)	Salmonidae	A
921	60te		Acipenseridae	A
922	A (130		Salmonidae	A
		icial common name (alternatively known as nelma, sheefish, inc	onnu, connie)	
923		Sea Trout, Salmo trutta araiensis (Salmo trutta)	Salmonidae	A
KORE	EA (SO	UTH) 2020 August 7 (Protected Marine Life)	Blk/4	
	380w	,	Syngnathidae	A
		Longnose Seahorse, <i>Hippocampus trimaculatus</i>	Syngnathidae	A
No Sc#		MS/4 Blks of Sc# 257a-d w/ Spotted Seahorse in margin		
MACA	40	2020 March 1 (Traditional Snack Foods) SS/1	
1594	14p	Doce de pintura artistica (sugar painting) w/stylized fish on ta	, , , , , , , , , , , , , , , , , , ,	C S
	1			

MACAO (conntinued)		Cd I D:) CG/1	
1609 Margin LL: Stylized carp/kg	t 10 (Luo Shen Fu, Ode to the Goddess oi (2)		ASZ
MEXICO 3171 13.50p Silver pear w/"Cuid	2020 (No Date) (Folk Art Type of 200 ad de Mexico" inscription with stylized		C
MONACO	2020 June 11 (Coral Reef) SS/3		
3012a €1.16 Coral and fish (Anti- LR: U/I fish in	hiase sp.?)	Serranidae	В
3012b €1.40 Coral, diver, and fis U/I fish in ba	• •	Serranidae	В
3012 MarginLL: Anthiase sp.?		Serranidae	SS Z
3025a €1.40 Emblems of 17 Su	2020 October 23 (United Nations, 75 ustainable Development Goals w/ St	· · · · · · · · · · · · · · · · · · ·	ir
MOROCCO	2020 June 5 (World Environment Da	y) Vert. Pair & SS/2	2
1287a 3.75d Brown Trout, Salmo	o trutta, Perf 131/4 syncopated	Salmonidae	A
1287c 3.75d Sc# 1287a, Perf	13 ¹ / ₄ w/o syncopate		A
1287e SS/2 Sc# 1287c-d		C 1 1 1 A	A
Margin LL: Brown Trout, S			SS Z
NEVIS	2020 January 6 (Marine Life)		
	olffish, Anarhichas lupus	Anarhichadidae	Α
	rfish (head/facing LT), Chaetodon or		ss Z
Margin LL: Damselfish sp. Background: Dark-handed l	Fusilier (school), <i>Pterocaesio tile</i>		SS Z
-		Cacsioniaac 11	. 55 2
NORFOLK ISLAND 1158 \$1.10 Bumphead Sunfish,	2020 July 14 (Fish) Set/2 & SS/2	Molidae	A
1159 \$2.20 Oarfish (King of H		Regalecidae	A
1159a Margin SS/2 Oarfish (Kin	2 // 0	_	SSZ
PALAU	2018 December 25 (Sharks) Sheet/6		
ŕ	chinus leucas (country name in purple)	Carcharhinidae	A
1410b 50c Same species (coun		Carcharhinidae	A
	rerdo cuvier (country name in purple	Carcharhinidae	A
1410d \$1 Same species (coun	2	Carcharhinidae Rhincodontidae	A
	odon typus (country name in purple) odon typus (country name in orange)	Rhincodontidae	A A
	Carcharodon carcharias		A SS
Margin U/I fish in backgrou			USZ
2		ach, MS/5, 2xMS/4, SS/1	
	Cave Eel, Protanguilla palau (black ba		
1420b \$1.95 Sc# 1420a (dark		Protanguillidae	A
1421 Margin U/I fish in backgrou			
	rouper, Epinephelus fuscoguttatus	Serranidae	A
1421b \$1.50 Honeycomb Group	per, Epinephelus merra	Serranidae	A

PALAU (con	tinued)		
1421c \$1.50	Redmouth Grouper, Aethaloperca rogaa	Serranidae	A
1421d \$1.50	Squaretail Coralgrouper, Plectropomus areolatus	Serranidae	A
1421e \$1.50	Camouflage Grouper, Epinephelus polyphekadion	Serranidae	A
1421f \$1.50	Barramundi Grouper (Barramundi ?), Lates calcarifer	Latidae	A
1422a \$1.20	Papuan Toby, Canthigaster papua	Tetraodontidae	A
1422b \$1.20	Black-saddled Toby (Valentin's Sharpnose Puffer), Canthigaster	valentine Tetraodontidae	e A
1422c \$1.20	Blue-spotted Puffer, Arothron caeruleopunctatus (Micronesia)	Tetraodontidae	A
1422d \$1.20	Map Puffer, Arothron mappa	Tetraodontidae	A
1422e \$1.20	Star Pufferfish (Stellate Puffer), Arothron stellatus	Tetraodontidae	A
1423a \$1.20	Tiger Shark, Galeocerdo cuvier	Carcharhinidae	A
1423b \$1.20	Blacktip Reef Shark, Carcharhinus melanopterus	Carcharhinidae	A
1423c \$1.20	Gray Reef Shark (Blacktail Reef Shark), Carcharhinus ambly	-	èΑ
1423d \$1.20	Great Hammerhead Shark, Sphyrna mokarran	Sphyrnidae	A
1424 Margi	n Great Barracuda, Sphyraena barracuda (large circular school)) Sphyraenidae	A
1424a \$1.20	Blacktip Reef Shark (2), Carcharhinus melanopterus	Carcharhinidae	A
	Remora (3), Remora sp.	Echeneidae	C
1424b \$1.20	Gray Reef Shark (Blacktail Reef Shark), Carcharhinus amblyrhy	nchos Carcharhinidae	A
1424c \$1.20	Same species, facing LT on dark background	Carcharhinidae	A
1424d \$1.20	Same species, facing RT	Carcharhinidae	A
	Jack (?) sp. in background	Carangidae	В
1425 \$4	Giant Manta, Mobula birostris	Myliobatidae	A
	2019 December 27 (Maroon Clownfish) MS/3.		
_	Maroon Clownfish (2) (Spinecheek Anenomefish), Amphiprion		e A
1442a \$1	Same species, facing LT	Pomacentridae	A
1442b \$2	Same species, facing RT	Pomacentridae	A
1442c \$3	Same species, facing RT in anemone	Pomacentridae	A
•	Same species, facing RT	Pomacentridae A M	S Z
1443a \$3	Same species, facing LT	Pomacentridae	A
1443b \$4	Same species, (2) facing RT and LT	Pomacentridae	A
	2019 December 28 (Diplomatic Relations Between Palau and	1 /	' 6
1446a \$1	Itabori ("storyboard") w/stylized Swordfish, Xiphias gladius f	C 1	C
	U/I fish facing LT		UC
1446 Margi	nUR: Stylized fish in house design		
PAPUA NEV	V GUINEA 2020 March 6 (Tuna Fishery Overprints of Sc#	# 1841-1842) Set/	3
1994 1.60k	Atlantic Bluefin Tuna, Thunnus thynnus (ovpt on 2k Sc#	1842) Scombridae	A
1995 5k	Yellowfin Tuna, Thunnus albacares (ovpt on 1.45k Sc# 1	Scombridae Scombridae	A
1996 6.90k	Yellowfin Tuna, Thunnus albacares (ovpt on 1.45k Sc# 1		A
	2020 March 7 (Chairmanship of the APEC Overprints of Sc#	1909-1910) Set/4	
1997 1.60k	LL: Stylized fish (ovpt on 6.80k Sc# 1909)		
1998 1.60k	LL: Stylized fish (ovpt on 6.80k Sc# 1910)		

ROMANI	A 2020 February 7 (Cats) Sheet/5 + label
6379 1.8	OL Persian cat with symbolic fish made from yarn B X
6379a Sh	et/5+label
	2020 July 2 (Spotted [Leopard-Type] Animals) Sheet/5 + label
6440 8.5	OL Leopard Shark, <i>Triakis semifasciata</i> Triakidae A
6440a Sh	et/5+label
RUSSIA	2020 July 8 (Republic of Karelia- Centenary) Single
8179 100	• • •
SPAIN	2020 March 20 (Abbreviations of Spanish Provinces – Type of 2019) Single
4401 A	Letters "CE" (Ceuta) with stylized fish hanging from "C" U C S
THAILA	2019 September 11 (Worldwide Fund for Nature) Set/4 & SS/1
3077 3b	Bryde's whale with U/I fish in background U
No Sc#S	S/1 Sc# 3077 w/whale-like shaped margin
3078 3b	Omura's whale with U/I fish in background U
3079 3b	Whale Shark, <i>Rhincodon typus</i> Rhincodontidae A
	U/I fish in background
3080 3b	Leatherback turtle with U/I fish in background U
No Sc#SS	1 Sc# 3080 w/turtle-like shaped margin
TUVALU	2019 May 1 (Day Octopi) Sheet/3 & SS/1
1445 Ma	rginUL/UR: Damselfish sp. Pomacentridae Z
1447 \$7	



ENTOMOLOGY

Editors

Don Wright BU 243 and Jose Reis BU 1889





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

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CZECH RE	PUBLIC	2021 February 1 5		
1k	Orange Tip, Anthoca	· ·	PIE, Pierinae	A
DENMARK	2020 Septem	ber 16 (Courteous Writing Campaign) S	et/5	
1855 10k 1857a	Stylized Bee. "Spre Booklet pane of 10, a	2	Apidae	В
FALKLAND		2020 November 20 (Children's Art)	•	
1287 32p	Stylized Insect		Insect	A
FINLAND		2021 January 21 (Let's Take Care)		
b 1st	Stylized Butterfly		Lepidoptera	A
f 1st	Stylized Bees	2021 April 20 (Endangered Animala)	Apidae	В
1st /	Apollo, <i>Parnassius ap</i>	2021 April 28 (Endangered Animals)	PAP, Parnassiinae	A
			1711, 1 amassimae	11
GERMANY		2021 October 7	Lanidantana	A
€1.33	Butterfly		Lepidoptera	A
ISRAEL		2019 May 8 (Diplomatic Relations with		_
2.50s	& 7.40s UL: Butterf	2	Pieridae	В
	LR: Butterfly		Nymphalidae	В
4.10s	Animals & Birds. N	December 15 (Web of Life) (Identification insect	ons as per israel Post)	
Listings here		el Post listed R to L)		
_	`	y, <i>Deudorix livia</i> Klug	LYC, Theclinae	Z
8	Bright Babul Blue, A		LYC, Polyommatinae	\overline{Z}
	Iolaus glaucus Butl		LYC, Theclinae	Z
	Polyrhachis lacteipe	ennis Bolton	FOR, Formicinae	Z
	Oxyrhachis furva C	apener	Membracidae	Z
		er 15 (Museum) (L&R Box Identification	ns as per Israel Post)	
•	are L to R. (Israel Po	,		_
8 x 4	0 1	pustulifera Pic, at UR	CER, Lamiinae	В
		e, Steraspis squamosa Klug, at M	BUP, Chrysochroinae	В
	m Maybeette, <i>Anoxia</i> 5 <i>Certallum ebulini</i>	orientalis Krynicky, At LL & LR	SCA, Melolonthinae CER, Cerambycinae	B Z
Selvage:		Protaetia cuprea Fabr. (green)	SCA, Cetoniinae	Z
Margin, L Bo		Totacia caprea 1 aoi. (green)	Seri, Cetominae	
Row 1:	Xylocopa pubescens	Spinola	API, Xylocopinae	Z
		per, <i>Oedipoda miniata</i> Pallas	ACR, Oedipodinae	Z
	Desert Mantid, Eren	niaphila sp.	*ERE, Eremiaphilinae	Z
Row 2:	•	Pyrrhocoris apterus L.	Pyrrhocoridae	Z
		othemis erythraea Brulle	LIB, Sympetrinae	Z
	Tree Bug, Graphoso		PEN, Podopinae	Z
D 2		aropsis mendica Fabr.	EMP, Blepharodinae	Z
Row 3:	U/I Grasshopper	id Ivia augtonia I	Acrididae	Z
	Mediterranean Mant	ricket, <i>Gryllus bimaculatus</i> De Geer	*ERE, Iridinae GRY, Gryllinae	Z Z
	1 wo-spouce Field C	Ticket, Orythus vimaculalus De Geel	OKI, OIYIIIIat	L

ISRAEL (con	ntinued)		
Row 4:	Black-brown Diver, Dytiscus marginalis L.	DYT, Dytiscinae	Z
	Cicadetta musiva Germar	CICA, Cicadettinae	Z
Row 5:	Isophya savigni Brunner von Wattenwyl	TET, Phaneropterinae	Z
	Codophila varia Fabr.	PEN, Pentatominae	Z
	Truxalis sp.	ACR, Acridinae	Z
	Rhynocoris punctiventris Herrich-Schaeffer	RED, Harpactorinae	Z
Middle Box,	L to R: (Butterflies) Identifications by editor DW.	_	
Row 1:	Lesser Purple Emperor, Apatura ilia Denis & Schiffermuller	NYM, Apaturinae	Z
	U/I Butterfly	Lepidoptera	Z
	The Cleopatra, Gonepteryx cleopatra L.	PIE, Coliadinae	Z
Row 2:	Painted Lady, Vanessa cardui L.	NYM, Nymphalinae	Z
	2-Tailed Pasha, Charaxes jasius L.	NYM, Charaxinae	Z
	Large White, Pieris brassicae L.	PIE, Pierinae	Z
Row 3:	Red Admiral, Vanessa atalanta L.	NYM, Nymphalinae	Z
	Old World Swallowtail. Papilio machaon L.	PAP, Papilioninae	Z
	Colias sp., ♂	PIE, Coliadinae	Z
Row 4:	Large Tortoiseshell, Nymphalis polychloros L.	NYM, Nymphalinae	Z
	African Monarch, Danaus chrysippus L.	NYM, Danainae	Z
	Turkish Meadow Brown, Maniola telmessia Zeller	NYM, Satyrinae	Z
R Box: These	e are the names given in the order the Israel Post lists them, R to	L, top to bottom. The	
	order of the names does not correspond to the order of the beet	eles in the box. As an	
	example, Batocera rufomaculata is 3rd on Row 2 on the Israel	Post list, but it is 3rd in	
	Row 3 on the s/s. Additionally, Israel Post only lists 14 beetle	names while there are 15	5
	beetles shown. Further work is needed to put the names in pro	per order.	
Top Row:	Certallum ebulinum L.	CER, Cerambycinae	Z
_	Mylabris sp.	MEL, Meloinae	Z
	Neoplagionotus bobelayei Brulle	CER, Cerambycinae	Z
	Red Palm Weevil, Rhynchophorus ferrugineus Olivier	DRY, Rhynchophorina	e Z
	Graphipterus sp.	CAR, Lebiinae	Z
Row 2:	Capnodis carbonaria Klug	BUP, Chrysochroinae	Z
	Agonum impressum Panzer	CAR, Carabinae	Z
	Mango Stem Borer, Batocera rufomaculata De Geer	CER, Lamiinae	Z
	Scarabaeus sp.	SCA, Scarabaeinae	Z
	Julodis sp.	BUP, Julodinae	Z
Row 3:	Anoxia sp.	SCA, Melolonthinae	Z
	Sycopant, Calosoma sycophanta L.	CAR, Carabinae	Z
	Agapanthia sp.	CER, Lamiinae	Z
	Beetle	Scarabaeidae	Z
This s/s sets a	a record for the most different insect species with 47 and a total of	of 56 on one issue	

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

JAPAN		2020 June 10 (Flora & fauna of Iriomo	ote Island) Set/10	
4404 Sheet of 10				
4404f	84¥ L	arge Tree Nymph, Idea leuconoe Erichson	NYM, Danainae	A
LUXI	EMBOU	JRG 2020 December 8 (Wild Bees) Se	t/5	
a	E50g.	Early Bumblebee, <i>Bombus pratorum</i> L.	API, Apinae	A
b	_	Horned Mason Bee, Osmia cornuta Latreille	MEG, Megachilinae	A
c	_	Trachusa byssina Panzer	MEG, Megachilinae	A
d	_	Green-eyed Flower Bee, Anthophora bimaculata Panzer	API, Apinae	A
e	E50g.	Eucera nigrescens Perez	API, Apinae	A
NETH	IERLA	• • •	Set/10	
e	(96c)	European Beewolf, <i>Philanthus triangulum</i> Fabr.	CRA, Philanthinae	A
SING	APORI	E 2019 May 8 (Diplomatic Relations with	n Israel) Set/2, SS/1	
1967	\$1.30	UL: Butterfly	Pieridae	В
1968	\$1.30	LR: Butterfly	Nymphalidae	В
1968a		Souvenir sheet of 2 #1967-68		
	Margin	n R: Butterfly silhouette	Lepidoptera	Z
SOUT	TH GEO	ORGIA IS. & SOUTH SANDWICH IS. 2020 October 15 (D	efinitives) Set/12	
619	1p	Eretmoptera murphyi Schaeffer	CHI, Orthocladiinae	A
SWEI	DEN	2021 January 14 (Nature Scenes)		
	(12k)	Stylized Fritillary Butterfly on flower	NYM, Heliconiinae	В
TONO	TA	2020		
a	75c	Large Blue, Maculinea arion L.	LYC, Polyommatinae	A
b	\$1	Gatekeeper, Pyronia tithonus L.	NYM, Satyrinae	A
c	\$5	High Brown Fritillary, Fabriciana adippe Schiffermulle	NYM, Heliconiinae	A
d		Clouded Yellow, Colias croceus Geoffroy	PIE, Coliadinae	A
a	\$12.10	White Admiral, Limenitis arthemis Drury	NYM, Limenitidinae	A
b	\$20	Eros Blue, <i>Polyommatus eros</i> Ochsenheimer	LYC, Polyommatinae	A
c	\$50	Dark Green Fritillary, Speyeria aglaja L.	NYM, Heliconiinae	A
d	\$60	Mustard White, Pieris napi L.	PIE, Pierinae	A
TONO	GA - NI	UAFO'OU 2020		
a	75c	Glanville Fritillary, Melitaea cinxia L.	NYM, Nymphalinae	A
b	\$1	Grizzled Skipper, Pyrgus malvae L.	HES, Pyrginae	A
C	\$5	Brown Argus, Aricia agestis Denis & Schiffermuller	LYC, Polyommatinae	A
d		Brimstone, Gonepteryx rhamni L., also in margin	· · · · · · · · · · · · · · · · · · ·	AΖ
a b	\$12.10	Peacock, <i>Nymphalis io</i> L. Chalk-hill Blue, <i>Polyommatus coridon</i> Poda, also in margin	NYM, Nymphalinae	Α Λ 7
c	\$20 \$50	Green Hairstreak, <i>Callophrys rubi</i> L.	LYC, Theclinae	AZ A
d	\$60	Eurasian Comma, Nymphalis c-album L.	NYM, Nymphalinae	A
-	400	Comming Try mp towers C we com L.		

TURI	KMENI	STAN 2020 (Beekeeping)		
a	2.50m	Western Honeybee, Apis mellifera L.	API, Apinae	В
		Danaus sp.	NYM, Danainae	В
b-d	3.50m	-5m Western Honeybee, Apis mellifera L.	API, Apinae	A
UNIT	ED NA	TIONS		
New '	York	2020 December 5 (World Soil Day) Set	/5	
1260	\$1.20	Stylized Butterfly	Lepidoptera	В
1262a	ı	Vert strip of 5 #1258-62		
Vienn	ıa	2020 April 22 (Earth Day) Set/2		
660	85c	"Lepidopterist". Art work by Paul Villinski	Lepidoptera	В
UNIT	ED ST	ATES 2021		
	(75c)	Colorado Hairstreak, Hypaurotis crysalus Edwards	LYC, Theclinae	A
URU	GUAY	2020 (Pollinators)		
a 27	p Aug	ust's Carpenter Bee, Xylocopa augusti Lepeletier, &. Also on la	abel API, Xylocopinae	A
b	27p		HAL, Halictinae	A
		HE CATALOG - Not listed in catalogs		
CEN	TRAL A	FRICAN REP. 2020 June 22 (Stamperija CA-200414a	&b)	
a		Mocker Swallowtail, Papilio dardanus Brown	PAP, Papilioninae	A
b	800fr	Caper White, Belenois aurota Fabr.	PIE, Pierinae	A
c	800fr	Broad-bordered Grass Yellow, Eurema brigitta Stoll	PIE, Coliadinae	A
d	800fr	African Monarch, Danaus chrysippus L.	NYM, Danainae	A
e	3000fi	Narrow Blue-banded Swallowtail, <i>Papilio nireus</i> L.	PAP, Papilioninae	A
	Margi	n LL: Crossley's Forest Queen, Euxanthe crossleyi Ward	NYM, Charaxinae	Z
	UR:	Euxanthe trajanus Ward	NYM, Charaxinae	Z
		2020 June 2 2 (Stamperija CA-200415ad	&b)	
a	800fr	Eastern Dotted Border, Mylothris agathina Cramer	PIE, Pierinae	A
b	800fr	Red Admiral, Vanessa atalanta L.	NYM, Nymphalinae	A
c	800fr	Holly Blue, Celastrina argiolus L.	LYC, Polyommatinae	A
d	800fr	Glanville Fritillary, Melitaea cinxia L.	NYM, Nymphalinae	A
e	3000fi	Eastern Tiger Swallowtail, Papilio glaucus L., Q	PAP, Papilioninae	A
	Margi	n UR: 2 Amethyst Blues, Zizeeria knysna Trimen	LYC, Polyommatinae	Z
		Bottom: Pipevine Swallowtail, Battus philenor L.	PAP, Papilioninae	Z
		2020 June 22 (Stamperija CA-200416a)	02 & b14)	
440fr	Scarce	Swallowtail, Iphiclides podalirius L., San Marino #1281 s-o-s	PAP, Papilioninae	A
1000	frMour	ning Cloak, Nymphalis antiopa L., San Marino #1283 s-o-s	NYM, Nymphalinae	A
		2020 July 24 (Mushrooms) (Stamperija	CA-200504a&b)	
b	50fr	Apollo, Parnassius apollo L.	PAP, Parnassiinae	В
c	850fr	Purple-shot Copper, Lycaena alciphron Rottemburg	LYC, Lycaeninae	В
	3300fi	Asian Swallowtail, <i>Papilio xuthus</i> L. Also in margin	PAP, Papilioninae	В
	Margi	n Top, LL, LR: Red Wood Ant, Formica polyctena Forster	FOR, Formicinae	В

CHA	D	2020 May 30 (Stamperija TCH-200307	'a&b)	
a	800fr	Falcate Orange Tip, Anthocharis midea Hubner	PIE, Pierinae	A
b	800fr	Spectacle Swordtail, Graphium mandarinus Oberthur	PAP, Papilioninae	A
c	c 800fr Common Nawab, Polyura athamas Drury		NYM, Charaxinae	A
d	800fr	Cruiser, Vindula erota Fabr.	NYM, Heliconiinae	A
e	3300fi	Royal Assyrian, Terinos terpander Hewitson	NYM, Charaxinae	A
	Margin	n: Orange Oakleaf, Kallima inachus Boisduval	NYM, Nymphalinae	Z
		2020 August 20 (Stamperija TCH-2004	405a&b)	
a	800fr	Western Honeybee, Apis mellifera L.	API, Apinae	A
b	800fr	Eastern Honeybee, Apis cerana Enderlein	API, Apinae	A
c	800fr	Common Carder Bee, Bombus pascuorum Scopoli	API, Apinae	A
d	800fr	Eastern Carpenter Bee, <i>Xylocopa virginica</i> L.	API, Xylocopinae	A
e	3300fi	Western Honeybee, Apis mellifera L. Also in margin	API, Apinae	ΑZ
		2020 August 20 (Stamperija TCH-2004	106a&b)	
c&d,	800fr.	Stylized Malaria Mosquito, Anopheles sp.	CUL, Anophelinae	В
	3300fi	No insect		
	Margi	LL: Stylized Malaria Mosquito, Anopheles sp.	CUL, Anophelinae	Z
LIBERIA 2020 June 28 (Stamperija LIB-200309a&b)				
a	\$200	Mourning Cloak, Nymphalis antiopa L.	NYM, Nymphalinae	A
b	\$200	Peacock, Nymphalis io L.	NYM, Nymphalinae	A
c	\$200	Sleepy Orange, Eurema nicippe Cramer	PIE, Coliadinae	A
d	\$200	Cardinal, Argynnis pandora Schiffermuller	NYM, Heliconiinae	A
e	\$200	Apollo, Parnassius apollo L.	PAP, Parnassiinae	A
f	\$200	Common Pierrot, Castalius rosimon Fabr.	TTTO D 1	Α
\$1200 Malachite, Siproeta stelenes L.			LYC, Polyommatinae	A
		Malachite, Siproeta stelenes L.	NYM, Nymphalinae	A
			_	
TOG	Margin	Malachite, Siproeta stelenes L.	NYM, Nymphalinae NYM, Nymphalinae (Useful Parasites)	A
TOGo a-a	Margii O	Malachite, Siproeta stelenes L. n: Scarlet Peacock, Anartia amathea L.	NYM, Nymphalinae NYM, Nymphalinae (Useful Parasites) NYM, Danainae	A Z B
	Margii O	Malachite, <i>Siproeta stelenes</i> L. n: Scarlet Peacock, <i>Anartia amathea</i> L. 2020 October 8 (Stamperija TG-200333a&b)	NYM, Nymphalinae NYM, Nymphalinae (Useful Parasites)	A Z
	Margin O 800fr	Malachite, Siproeta stelenes L. n: Scarlet Peacock, Anartia amathea L. 2020 October 8 (Stamperija TG-200333a&b) Monarch, Danaus plexippus L.	NYM, Nymphalinae NYM, Nymphalinae (Useful Parasites) NYM, Danainae	A Z B
a-a	Margii O 800fr 800fr	Malachite, Siproeta stelenes L. n: Scarlet Peacock, Anartia amathea L. 2020 October 8 (Stamperija TG-200333a&b) Monarch, Danaus plexippus L. Lespesia archippivora Riley Aphidius ervi Haliday Green Peach Aphid, Myzus persicae Sulzer	NYM, Nymphalinae NYM, Nymphalinae (Useful Parasites) NYM, Danainae Tachinidae BRA, Aphidiinae APH, Aphidinae	A Z B B
a-a	Margii O 800fr 800fr	Malachite, Siproeta stelenes L. n: Scarlet Peacock, Anartia amathea L. 2020 October 8 (Stamperija TG-200333a&b) Monarch, Danaus plexippus L. Lespesia archippivora Riley Aphidius ervi Haliday Green Peach Aphid, Myzus persicae Sulzer L: Anagyrus lopezi De Santis	NYM, Nymphalinae NYM, Nymphalinae (Useful Parasites) NYM, Danainae Tachinidae BRA, Aphidiinae APH, Aphidinae *ENC, Tetracneminae	A Z B B B
a-a	Margin O 800fr 800fr 3300fr	Malachite, Siproeta stelenes L. n: Scarlet Peacock, Anartia amathea L. 2020 October 8 (Stamperija TG-200333a&b) Monarch, Danaus plexippus L. Lespesia archippivora Riley Aphidius ervi Haliday Green Peach Aphid, Myzus persicae Sulzer L: Anagyrus lopezi De Santis R: Citrus Mealybug, Planococcus citri Risso	NYM, Nymphalinae NYM, Nymphalinae (Useful Parasites) NYM, Danainae Tachinidae BRA, Aphidiinae APH, Aphidinae *ENC, Tetracneminae Pseudococcidae	A Z B B B
a-a	Margin O 800fr 800fr 3300fr	Malachite, Siproeta stelenes L. n: Scarlet Peacock, Anartia amathea L. 2020 October 8 (Stamperija TG-200333a&b) Monarch, Danaus plexippus L. Lespesia archippivora Riley Aphidius ervi Haliday Green Peach Aphid, Myzus persicae Sulzer L: Anagyrus lopezi De Santis	NYM, Nymphalinae NYM, Nymphalinae (Useful Parasites) NYM, Danainae Tachinidae BRA, Aphidiinae APH, Aphidinae *ENC, Tetracneminae	A Z B B B B B B

^{*}New Family on stamps

ENC = Encyrtidae ERE = Eremiaphilidae



PALEONTOLOGY

Editor Michael Kogan, BU 1863



New Listings

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

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

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

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

TAJIKISTAN 2020 December 20 (Paleontology of Tajikistan)

- TJS 6.30 †Kansajsuchus extensus and TJS 7.00 Settlement of Konsoy
- TJS 5.80 Dinosaur footprint and TJS 9.00 Shirkent National Park
- TJS 5.80 Amonite Cleoniceras and TJS 17.60 Pamir Montains
- TJS 12.70 †Mammuthus meridionalis and 15.00 Kayrakkum reservoir

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



These stamps issued in four Mini-Sheets. Every Mini-Sheet contains four pairs of stamps.

The stamp on the left shows fossil, footprint or reconstruction of prehistoric animal when the stamp on the right shows landscape of a place where its fossils were found.

Left side of every Mini-Sheet has a short explanation on Tajik and English languages.

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

a

b

850fr †Pteranodon longiceps

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

More details are here: http://www.paleophilatelie.eu/description/stamps/tajikistan 2020.html



In 2020 Tajikistan starts to produce their stamps by Stamperija agency.

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

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

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

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

CENTRAL AFRICAN REPUBLIC **2020 November 30** (150y American Museum of Natural History) MS 4 & SS 1 [*1] SS 3600fr Mounted skeleton of †Barosaurus dinosaur †Diplodocidae A SS **2020 November 30** (Dinosaurs) MS 4 & SS 1 [*1] 850fr †Parasaurolophus walkeri †Hadrosauridae A MS a b 850fr †Majungasaurus crenatissimus †Abelisaurida A MS †Abelisauridae 850fr †Abelisaurus comahuensis A MS c †Spinosauridae 850fr †Spinosaurus aegyptiacus d A MS SS 3300fr †Ankylosaurus magniventris †Ankylosauridae e A MS Margin: †Spinosaurus aegyptiacus †Spinosauridae A SS Z **2020 July 24** (80y discovery of cave paintings in Lascaux, France) MS 4 & SS 1 [*1] MS 900fr x4 SS 3600fr **2020 July 24** (Flying dinosaurs) MS 4 & SS 1 [*1] [*2] 850fr †Archaeopteryx lithographica †Archaeopterygidae A MS

†Pteranodontidae

A MS

CEN	FRAL SAFRICAN REPUBLIC (continued)	
c	850fr †Dimorphodon macronyx	†Dimorphodontidae A MS
d	850fr †Ornithocephalus banthensis	†Rhamphorhynchidae A MS
e	SS 3300fr † <i>Pterodactylus longicaudus</i>	Suborder: †Pterodactyloidea A MS
	Margin: †Ornithocephalus banthensis	†Rhamphorhynchidae A SS
	†Pteranodon longiceps	†Pteranodontidae A SS Z
	†Dimorphodon macronyx	†Dimorphodontidae A SS Z
	2020 July 24 (Meteorites and Dino	
a	850fr Iron meteorite	
b	850fr The Canyon Diablo meteorite and †Pterosauromo	orpha B MS
c	850fr L chondrite and †Protoceratops andrewsi	†Protoceratopsidae B MS
d	850fr Tektite and †Ouranosaurus nigeriensis	Suborder: †Ornithopoda B MS
e	SS 3300fr The Chelyabinsk meteor	
	Margin: Iron meteorite; †Proceratosaurus bradleyi	†Proceratosauridae B SS Z
	2020 June 22 (Dinosaurs) MS 4 &	SS 1 [*1]
a	800fr † <i>Cryolophosaurus ellioti</i>	Clade: Theropoda A MS
b	800fr †Lexovisaurus durobrivensis	†Stegosauridae A MS
c	800fr †Pentaceratops sternbergii	†Ceratopsidae A MS
d	800fr †Camarasaurus supremus	†Camarasaurida A MS
e	SS 3000fr †Styracosaurus albertensis	†Ceratopsidae A SS
	Margin: †Zhongyuansaurus luoyangensis	†Ankylosauridae A SS Z
	†Ophiacodon mirus	†Ophiacodontidae A SS Z
	2020 June 22 (Flying dinosaurs)	MS 4 & SS 1 [*1][*2]
a	800fr †Dimorphodon macronyx	†Dimorphodontidae A MS
b	800fr † <i>Peteinosaurus zambelli</i> Order:	†Pterosauria A MS
c	800fr †Rhamphorhynchus muensteri	†Rhamphorhynchidae A MS
d	800fr †Anhanguera santanae	†Anhangueridae A MS
	†Dorygnathus banthensis	†Rhamphorhynchidae A MS
	Margin: †Pterodactylus antiquus	Suborder: †Pterodactyloidea A MS
e	SS 3000fr † <i>Archaeopteryx lithographica</i>	†Archaeopterygidae A MS
	2020 June 22 (Extinct Mammals)	MS 4 & SS 1 [*1]
a	900fr † <i>Cypretherium coarctatum</i>	†Entelodontidae A MS
b	900fr †Megacerops coloradensis	†Brontotheriidae A MS
c	900fr †Platybelodon grangeri	†Amebelodontidae A MS
d	900fr †Sivatherium giganteum	Giraffidae A MS
e	SS 3600fr †Macrauchenia patachonica	†Macraucheniidae A SS
	Margin: †Sivatherium giganteum	Giraffidae B SS Z
DJIB	OUTI 2020 July 27 (Flying dinosaurs) M	4S 4 & SS 1 [*1][*2]
a	250fr †Anhanguera blittersdorffi	†Anhangueridae A MS
b	250fr †Peteinosaurus zambelli	Order: †Pterosauria A MS
c	250fr †Quetzalcoatlus northropi	†Azhdarchidae A MS
d	250fr †Pteranodon longiceps	†Pteranodontidae A MS
e	SS 1000fr † Ornithocephalus banthensis	†Rhamphorhynchidae A SS
	· · · · · · · · · · · · · · · · · · ·	r - y

DJIE	BOUTI (continued)	
	Margin: †Quetzalcoatlus northropi	†Azhdarchidae B SS Z
	†Pteranodon longiceps	†Pteranodontidae A SS Z
	†Peteinosaurus zambelli	Order: †Pterosauria B SS Z
	2020 July 27 (Fossils)	MS FB 250 x4
a	250fr †Carcharocles megalodon tooth	†Otodontidae A MS
b	250fr Triceratops horridus	†Ceratopsidae A MS
c	250fr †Ammonite	Subclass: †Ammonoidea A MS
d	250fr †Trilobite fossil	Phylum: Arthropoda A MS
e	SS 1000fr †Seymouria fossil	†Seymouriidae A SS
	Margin: †Trilobite fossil	Phylum: Arthropoda A SS Z
	2020 June 12 (80y discovery of cave paintings in Lascaux, I	France) MS 2 x2 & SS 1 [*1]
	MS 200fr x2	
	MS 400fr x2	
	SS 1000fr	
GUI	NEA 2020 October 26 (Fossils) (MS 4 & S	S 1) [*1]
a	15000fr †Sclerocephalus auseris	†Sclerocephalidae A MS
b	15000fr Fossils of Trilobites	Phylum: Arthropoda A MS
c	15000fr †Sinraptor dongi	†Metriacanthosauridae A MS
d	†Plesiosaurus dolichodeirus	†Plesiosauridae A MS
e	SS 60000fr †Ichthyosaurus communis	†Ichthyosauridae A SS
	Margin: Galeocerdo mayumbensis tooth	Carcharhinidae B SS Z
	Ammonites	Subclass: †Ammonoidea B SS Z
	2020 October 26 (PREHISTORIC WATER A	,
a	15000fr †Tylosaurus proriger	†Mosasauridae A MS
b	15000fr †Mawsonia gigas	†Mawsoniidae A MS
c	15000fr †Shonisaurus popularis	†Shonisauridae A MS
d	15000fr †Kronosaurus queenslandicus	†Pliosauridae A MS
e	SS 60000fr †Ichthyosaurus communis	†Ichthyosauridae A SS
	Margin: †Kronosaurus queenslandicus	†Pliosauridae A SS Z
GUI	NEA-BISSAU 2020 September 29 (Prehistoric birds	, <u> </u>
a	740fr †Argentavis magnificens	†Teratornithidae A MS
b	740fr † <i>Iberomesornis romerali</i>	†Iberomesornithidae A MS
c	740fr †Dromornis stirtoni	†Dromornithidae A MS
d	740fr †Confuciusornis sanctus	†Confuciusornithidae A MS
e	SS 3000fr †Hieraaetus moorei	Accipitridae A SS
	Margin: † <i>Vorombe titan</i>	†Aepyornithidae A SS Z
LIBI	ERIA 2020 November 30 (Dinosaurs) MS	4 & SS 1 [*1]
a	\$300 †Ankylosaurus magniventris	†Ankylosauridae A MS
b	\$300 †Spinosaurus aegyptiacus	† Spinosauridae A MS
c	\$300 †Triceratops prorsus	†Ceratopsidae A MS
d	\$300 †Heterodontosaurus tucki	†Heterodontosauridae AMS

LIBE	RIA (co	ontinued)	
e	SS	\$1200 †Tarbosaurus bataar	†Tyrannosauridae A SS
		†Stegosaurus stenops	†Stegosaurida A SS
	Margi	n: †Coelophysis bauri	†Coelophysidae A SS Z
		†Heterodontosaurus tucki	†Heterodontosauridae A SS Z
	2020	November 30 (80y discovery of cave paintings in Lascaux)	(MS 4 & SS 1) [*1]
a	\$300	Marcel Ravidat 1922–1995	, , , , , , , , , , , , , , , , , , ,
b	\$300	Georges Agniel 1924–2012	
c	\$300	Simon Coencas 1927–2020	
d	\$300	Jacques Marsal 1926–1989	
e	SS	\$1200 Marcel Ravidat 1922–1995	
	Margi	n: Lascaux International Center of Parietal Art, Homo sapier	1S
		2020 November 30 (Fossils) MS 4 & SS 1 x2 [*1	1]
a	\$300	†Asteroceras obtusum	Subclass: †Ammonoidea A MS
b	\$300	†Carcharocles megalodon tooth	†Otodontidae A MS
c	\$300	Seirocrinus subangularis	Pentacrinitidae A MS
d	\$300	Athleta spinosa	Volutidae A SS
e	SS	\$1200 Latimeria chalumnae	Latimeriidae A MS
	Margi	n: Trilobite (?)	Class: †Trilobita A MS Z
f		SS \$1200 Eusthenopteron foordi	†Tristichopteridae A SS Z
	Margi	n: Ammonite S	ubclass: †Ammonoidea A SS Z
		2020 October 26 (Flying dinosaurs) MS 4 & SS 1	
a	\$300	†Anhanguera blittersdorffi	†Anhangueridae A MS
b	\$300	†Anurognathus ammoni	†Anurognathidae A MS
c	\$300	†Pteranodon longiceps	†Pteranodontidae A MS
d	\$300	†Microraptor zhaoianus	†Dromaeosauridae A MS
e	SS	\$1200 †Pteranodon longiceps	†Pteranodontidae A SS
	Margi	n: †Quetzalcoatlus northropi	†Azhdarchidae A SS Z
		2020 October 26 (PREHISTORIC HUMANS) MS	S 4 & SS 1 [*1]
a	\$300	Neanderthals hunting a bison	
b	\$300	A Neanderthal's and a modern human's skull	
c	\$300	Tools used by prehistoric humans	
d	\$300	Homo neanderthalensis	Hominidae A MS
e	SS	\$1200 Homo neanderthalensis	Hominidae A SS
	Margi	n: Obsidian knife with bone handle	
MAL	DIVES	2020 July 21 (Fossils) (MS 4 & SS 1) [*1]	
a	22r	†Collignoniceras woolgari	†Collignoniceratidae A MS
b	22r	†Plesiosaurus macrocephalus	Order: †Plesiosauria A MS
c	22r	†Eryon propinguus	†Eryonidae A MS
d	22r	†Bos primigenius	Bovidae A MS
==		n: †Rhomaleosaurus cramptoni	†Rhomaleosauridae A MS Z
e	SS	70r †Diprotodon optatum	†Diprotodontidae A SS
=		n: †Megatherium cuvieri	†Megatheriidae A SS Z
	<i>S</i> -	1 0	

SĀO	TOMÉ and Pl	RINCIPE 2020 November 30 (Dinosaur	s)
a	31d †Trice	eratops horridus	†Ceratopsidae A MS
b	31d <i>†Edm</i>	ontosaurus regalis	†Hadrosauridae A MS
c	31d <i>†Spin</i>	osaurus aegyptiacus	†Spinosauridae A MS
d	31d <i>†Giga</i>	antichthys numidus	Pristidae A MS
e	SS 124d	†Parasaurolophus walkeri	†Hadrosauridae A SS
	Margin: †Cte	rnochasma roemeri	†Ctenochasmatidae A SS Z
	†Tyra	nnosaurus rex	†Tyrannosauridae A SS Z
		November 30 (Extinct species) MS 4 & SS 1	[*1]
a	· ·	odon fatalis	Felidae A MS
b	· ·	nmuthus primigenius	Elephantidae A MS
c	· ·	n priscus	Bovidae A MS
d		odon fatalis	Felidae A MS
e	SS 124d	†Arsinoitherium zitteli	†Arsinoitheriidae A SS
	Margin: †Me	gantereon cultridens	Felidae A SS Z
SIER	RA LEONE	2020 August 31 (Dinosaurs) MS 4 &	SS 1 [*1]
a	14500le	†Spinosaurus aegyptiacus	†Spinosauridae A MS
		†Triceratops horridus	†Ceratopsidae B MS
b	14500le	†Pterodactylus longicaudus	†Rhamphorhynchidae A MS
		†Tyrannosaurus rex	†Tyrannosauridae A MS
c	14500le	†Pteranodon longiceps	†Pteranodontidae A MS
		†Ankylosaurus magniventris	†Ankylosauridae A MS
d	14500le	†Stegosaurus stenops	†Stegosauridae A MS
e	SS 58000	Ole †Brachiosaurus altithorax	†Brachiosauridae A SS
	Margin: †Ce	ntrosaurus apertus	†Ceratopsidae A SS Z
	, ,	nnosaurus rex	†Tyrannosauridae A SS Z
		August 31 Prehistoric water animals MS 4 & S	
a	14500le	†Nothosaurus mirabilis	†Nothosauridae A MS
b	14500le	†Hydrotherosaurus alexandrae	†Elasmosauridae A MS
c	14500le	†Ichthyosaurus communis	†Ichthyosauridae A MS
d	14500le	†Pliosaurus ferox	†Pliosauridae A MS
e	SS 58000	1 0	†Mosasauridae A SS
	•	nichthys terrelli	†Dinichthyidae A SS Z
] [*2]
a	14500le	†Archaeopteryx lithographica	†Archaeopterygidae A MS
b	14500le	†Eudimorphodon ranzii	†Eudimorphodontidae A MS
c	14500le	†Zhejiangopterus linhaiensis	†Azhdarchidae A MS
d	14500le	†Zhenyuanopterus longirostris	†Boreopteridae A MS
e	SS 58000	1 2	†Rhamphorhynchidae A SS
	•	ranodon longiceps	†Pteranodontidae A SS Z
		August 31 Fossils MS 4 & SS 1 [*1]	#IIodusid A NGC
a L	14500le	†Parasaurolophus walkeri	†Hadrosauridae A MS
b	14500le	,	Subclass: †Ammonoidea A MS
c	14500le	†Brachiopoda	Phylum: Brachiopoda A MS

SIERRA LEONE (continued)

d	14500le †	Ichthyosaurus communis	†Ichthyosauridae A MS
e	SS 58000le	$\dagger A$ mmonoidea	Subclass: †Ammonoidea A SS
	Margin: †Tyranr	nosaurus rex	†Tyrannosauridae A SS Z
	2020 Jul	ly 15 80y discovery of cave paintings in Lascau	ix) MS 4 & SS 1) [*1]
	MS Le 14500 x ²	4	
	SS Le 58000		

	55 E C 30000			
TOG	O 2020 October 08 Prehistoric humans MS 4 & SS 1	[*1]		
a	800fr †Homo neanderthalensis	Hominidae A MS		
b	800fr †Lucy	Hominidae A MS		
c	800fr †Australopithecus afarensis	Hominidae A MS		
d	800fr †Homo erectus	Hominidae A MS		
e	SS 3300fr †Homo neanderthalensis	Hominidae A SS		
	Margin: †Australopithecus afarensis	Hominidae A SS Z		
	2020 October 08 Flying dinosaurs MS 4 & SS 1 [*1]	[*2]		
a	800fr †Dsungaripterus weii	†Dsungaripteridae A MS		
b	800fr †Gnathosaurus subulatus	†Ctenochasmatidae A MS		
c	800fr †Pterodactylus antiquus	Suborder: †Pterodactyloidea A MS		
d	800fr †Pterodaustro guinazui	†Ctenochasmatidae A MS		
e	SS 3300fr † <i>Tupandactylus imperator</i>	†Tapejaridae A SS		
	Margin: †Dimorphodon macronyx	†Dimorphodontidae A SS Z		

Personalized stamps

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



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

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

Some details about the park are on Wikipedia:

https://en.wikipedia.org/wiki/

Valley of the Dinosaurs, Para%C3%ADba

In 2019 Brazilian Post issued two personalized stamps with

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

Other official stamps to consider:

GREAT BRITAIN 2021 January 14 "National Parks"

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

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

The South Downs (the second from the left on the bottom row) are formed from a thick band of chalk which was deposited during the Cretaceous Period between 75 and 90 million years



ago this part of the country was under a shallow tropical sea. Chalk muds were laid down at the bottom of this sea and were very thick and widespread.

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

More details are here: http://www.paleophilatelie.eu/description/stamps/others/uk 2021.html

Postal stationeries

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



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

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

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

Imprinted stamp on the new postal stationery has the face value of 1.20 yuan. The cachet represents the reconstruction of the dinosaur.

According the text on the reverse side of the new cover, the face value of the imprinted stamp was changed in 2009.

More details about both postal stationeries (2002

1

中国邮政 CHINA



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

and 2020) are here:

http://www.paleophilatelie.eu/country/china.html#ps2

Postmarks

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

Future Issues

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



Notes:

- [*1] Commercial issue: stamps are issued with only one purpose to sell for collectors. Stamps of countries who issued too many or too expensive stamps. Not recommended for serious collectors.
- [*2] Flying dinosaurs is wrong term, as dinosaurs per definition are terrestrial animals. The flying reptiles called Pterosaurs.

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

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



www.Paleophilatelie.eu



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



BIOLOGY REFERENCE WEBSITES

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

STAMP ISSUES

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

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

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

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

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

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

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

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

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

Stamp World. Listings and illustrations of issues from all countries by year. Includes production information. Requires free registration and login. *http://www.stampworld.com/en/maps/Europe/* **Virtual Stamp Club.** Latest news from the world of stamp collecting. Links to other stamp collecting sites and the websites of almost every other collector society or major club.

http://www.virtualstampclub.com/

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

http://www.zillionsofstamps.com/

GENERAL

American Philatelic Society. Listings of dealers, local clubs, stamp shows, and other philatelic events. *http://stamps.org/*

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

Entomological 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.

 ${\it http://www.nic.funet.fi/pub/sci/bio/life/intro.html}$

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.

 $http://cache.ucr.edu/\!\!\sim\!\!heraty/beepage.html$

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 Databas**e. 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:

Cn	eck	Klist Codes:		
Br		Branch	Α	Subject is the primary design element
FI		Flowers (with or without other plant parts)	В	Subject is only part of the main design
Fr		Fruit (including seeds, nuts, grains, etc.)	С	Subject is a minor representation
Fr∖	/	Grain head with sheaf or stalk	G	Subject is a generalized depiction
L		Lichen	R	Related subject (e.g., scientist, equipment)
M		Mushroom or fungus	S	Subject is a stylized or symbolic depiction
Т		Trees (without flowers or fruit)	U	Subject is unidentified or unidentifiable
V		Various (vines, vegetables, roots, leaves, etc.)	Χ	Subject is a lookalike (e.g., mushroom cloud)
Wr		Wreath	Z	Subject is in the Margin or selvage
Wr	k	Head wreath (or chaplet)	*	Subject is natural color (no longer in use)
Ac	ron	ryms and Abbreviations:	ovpt	overprinted
AA	PΕ	American Association of Philatelic Exhibitors	perf	perforated
anr	niv	anniversary	photo	photogravure
ΑP	С	American Philatelic Center (Bellefonte, PA)	ptg	painting or artwork
ΑP	S	American Philatelic Society	R	right position indicator
ATA	4	American Topical Association	s/a	self-adhesive
bklt	t	booklet	Sc#	Scott Catalogue number
Ca	р	captioned	S-0-S	stamp on stamp
СТ	0	canceled to order	sp.	species
СТ	R	center position indicator	SS	souvenir sheet
DS		deluxe sheet	ssp.	sub-species
Ed.		Editor	s/t	se-tenant
Exp	00	Exposition	surch	surcharged
hor	iz	horizontal orientation	UL	upper left position indicator
imp	erf	imperforate	unwmk	un-watermarked
ins	cr	inscribed	UPU	Universal Postal Union
Intl		International	UR	upper right position indicator
L		left position indicator	US	United States
lith	0	lithography	USPOE	United States Post Office Department
LL		lower left position indicator	USPS	United States Postal Service
LR		lower right position indicator	var.	variety
Mi#	ŧ	Michel Catalog number	vert	vertical orientation
mn	ı	millimeter	Vol	Volume
MS	;	miniature sheet	wmk	watermarked
ML		middle left position indicator	WWF	World Wildlife Federation
MR	2	middle right position indicator	Yv#	Yvert & Tellier Catalog number
N/A	A	not applicable (or not available)	3	male symbol
nd		non-denominated	2	female symbol
NT	SS	National Topical Stamp Show	2	poisonous/venomous symbol
NW	/F	National Wildlife Federation	†	Extinct

Entomology Family Abbreviations:

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

Collecting Codes

0 Paleontology 1 Flora & Fauna 2 Botany 3 Zoology 4 Reptile & Amphibian

5 Birds 6 Fish 7 Insects 8 Mammals 9 Marine Life