

BIOPHILATELY

OFFICIAL JOURNAL OF THE BIOLOGY UNIT OF ATA

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**Great fleas have little fleas upon their backs to bite 'em,
And little fleas have lesser fleas, and so *ad infinitum*.**

—Augustus De Morgan



Dr. Indraneil Das Pangolins on Stamps

More Inside >>



IN THIS ISSUE

From the Editor's Desk	1
President's Message	2
Secretary-Treasurer's Corner	3
New Members	3
News of Note	3
Women's Suffrage – Dawn Hamman.....	4
Event Calendar	6
Wedding Set	16
Glossary	72

NEW ISSUES:

Botany – Christopher E. Dahle	17
Fungi – Paul A. Mistretta	28
Mammalia – Michael Prince	31
Ornithology – Glenn G. Mertz	35
Ichthyology – J. Dale Shively	57
Entomology – Donald Wright, Jr.	59
Paleontology – Michael Kogan	65

ARTICLES & ILLUSTRATIONS:

Pangolins on Stamps of the World – Dr. Indraneil Das	7
Squeaky Curtain – Frank Jacobs	15
New Plants in the Philatelic Herbarium – Christopher Dahle	23
Rats!	34
New Birds in the Philatelic Aviary – Charles E. Braun	51
Biology Reference Websites	69

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

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

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

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

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

FROM THE EDITOR'S DESK

While enjoying football on TV over the holidays, I had an epiphany—American television advertizing is biological. Geckos, emus, ducks, woodchucks, and “hump day” camels are selling insurance. Polar bears are promoting soft drinks. Horses and dogs are plugging beer. Cows are hawking fast-food chicken. Bunnies are peddling batteries and candy. Elephants are flogging pistachios. Tortoises are pushing broadband services. Bears are marketing toilet paper. Not to mention all the family pets that make cameo appearances looking cute, or knocking over Christmas trees and otherwise causing havoc. Botanical subjects have not much got in the act, yet.

I am unsure what all this means other than, as animals ourselves, we are attracted to, immersed in, and part of, the great biomass on this planet, which as far as we know right now, is unique in this solar system. Perhaps it is an indicator that Biology is the foremost area of scientific study, and as such, it should rank the Biology Unit first among all the study units in the ATA.

In January, a stamp show here in the Pacific Northwest had to cancel the day before it was scheduled to open. The show was planned for the same weekend at the same venue it had used for the past two decades. Dealers and collectors were looking forward to the event because it had been a while since the last big show in the area.

On Friday, the show chairman received a call from the person at the venue in charge of renting the hall. They had received one of the advertising postcards sent by the club and this alerted them to the fact that the club was expecting to use the venue. It seems that the person in charge of renting the hall did not record the show on their schedule, apparently due to a lack of follow-up by the club, and proceeded to rent it to another group. They did not realize the conflict until the postcard arrived.

There is a lesson here for us all. One of the “laws of life” is: “If something can go wrong, it will go wrong, and it will go wrong at the earliest opportunity.” Both the club and the venue made mistakes. If you are planning an event, it is essential to verify your plans and to not assume that everyone is on the same wavelength.

As you may have noted on the contributors page, we are missing associate editors for **Invertebrate Zoology** and **Microbiology**. If you have an interest in either of these areas, please contact me. Even if you feel you have no editing skills, you surely have the information needed for such columns and we can work together to produce them.

Our **Fungi** editor has been under the weather recently, but he summoned the strength to produce another column for this issue. The **Herpetology** editor has informed me that due to the dearth of new issues, he plans to submit his columns semi-annually instead of quarterly, so that column will next appear in the June edition.

If you have not yet renewed your membership for 2020, now is the time. A membership form is included again with this edition. Please fill it out and send your dues to the secretary. Donations are also greatly appreciated.

The ATA is working to produce a new handbook on topical collecting to replace HB #133, *Adventures in Topical Collecting*. Yours truly is serving as co-editor. We expect that the new book will be available by this summer. The Biology Unit has helped with this project by providing a \$200 donation for its production.

Jack R. Congrove



DUES RATES (US\$)

Regular membership (US & Canada)	\$25
Canada membership	\$30
Worldwide membership	\$45
On-line membership	\$15

ADVERTISING RATES

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

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

PRESIDENT'S MESSAGE

[Ed. Note: President Ryan's column was not received by publication time, so this is an extract of the vignette she provided for the upcoming ATA handbook *Topical Adventures*.]

Organized in May 1951, by seven likeminded men, the Biology Study Unit was the second study unit to affiliate with the American Topical Association (ATA). Homer L. Jones was the first member (BU1) and the first unit president. By the following summer, the Unit had grown to 76 members.

The Biology Unit is the largest group dedicated to the international cooperative study of biological postal issues and related materials. We are proud of these international ties, which foster greater knowledge. At present, the unit boasts membership in thirteen countries. Each member brings their individual expertise to the organization. The Biology Unit strives to further education and awareness of the living world around us all. Many of the more than 100 members are professionals in their biological field of philately. The study unit meets annually at the ATA national show.

The Biology Unit has, over the years, contributed to the advancement and growth of the ATA. The unit was the first to offer awards for unit related exhibitions at the ATA shows. They also were the first to produce handbooks for the ATA. Since 1952, when the ATA instituted the Distinguished Topical Philatelist Award to recognize service to topical philately in general and to the ATA in particular, 120 individuals have received this honor. Thirty of these awardees (one-quarter) have been members of the Biology Study Unit. The Biology Study Unit also boasts the largest membership to become ATA elected board members. This support will continue into the future.



Laurie

An advertisement for Stamp Smith. The background is a light beige color with a red border. At the top, the text reads "Stamp Smith" in a large, bold, black font, followed by "TOPICAL STAMPS & COVERS" in a smaller, bold, black font. Below this, on the left, is the text "U.S stamps, worldwide & covers," and "Send us your want list or visit our eBay store, Stamp Smith Stamps,". In the center is a large black silhouette of a cat sitting on a red surface, with several colorful postage stamps scattered around its paws. On the right side, vertically, is the address "1212 NE 96th Terrace, Kansas City, MO 64115". At the bottom right, the contact information is listed: "Tel: 816.734.4536" and "Email: smidale@umkc.edu".

SECRETARY-TREASURER'S CORNER

DUES

Thank you to those of you who have renewed your membership. Please send your dues, or let me know if you wish to resign. You can pay your dues using PayPal to the account dues@biophilately.org, or by sending a check to me payable to the Biology Unit. See address on inside cover.

DONATIONS

Last year our total expenses were \$3,600. About \$3,000 of this was the cost to print and mail the *Biophilately* journal. The Biology Unit also helped support the ATA booth at the National Topical Stamp Show (NTSS) in Omaha, Nebraska.

We have several life members and our dues last year brought in less than \$1,800. In addition we received \$500 in donations. We are very grateful to those of you who provided donations to help with our expenses. The Unit officers and board of directors want to encourage each of our members to consider donating to the Biology Unit. As you can see, our expenses currently outstrip the amount we collect in annual dues. We have some reserve funds, but naturally this condition cannot continue for very long before the Unit has to cut our publishing expense or raise dues again, or both if we want the Unit to continue its existence. Any amount will help.



ANNUAL MEETING

It is perhaps not too early to make your plans to attend the annual general meeting of the Biology Unit that will take place at the National Topical Stamp Show (NTSS) in Hartford, Connecticut, at the Great American Stamp Show on 20–23 August 2020. The date and time of the meeting are not yet set. Ordinarily this is a social meeting and we do not discuss detailed business matters. But it is a great opportunity to meet the officers and many of the other members of the Unit, and to enjoy the largest stamp show in the United States this year.

NEW MEMBERS

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

1900 Daniel J. Miller, Cape Vincent, New York birds (5), dragonflies (7), general natural history

NEWS OF NOTE

KOGAN WINS WEBSITE AWARD

Biophilately Paleontology editor, Michael Kogan, won a **Large Vermeil** award at the Chicagopex 2019 Philatelic Literature exhibition for his paleophilately website (www.paleophilatelie.eu). His award was in the electronic literature category, which is an increasing area given the expansion of electronic media.

His website also received a **Gold** award at BELPHILA 2019 in Brest, Belarus.

In addition to news and images about new issues, including postmarks, meters, and other philatelic items, the site offers an extensive catalogue of material relating to paleontology and paleoanthropology. All the pages are in English and the images are in full color. It would be difficult to find more complete information about the subject and impossible to find it in another single place.

APS SUMMER SEMINAR

Summer Seminar on Philately is a once-a-year opportunity to expand your philatelic knowledge and meet others who share your passion and interests. All courses are led by philatelic experts who are accomplished writers, exhibitors, experts, dealers, and specialized collectors. The seminar offers both two-day and four-day courses and will be held at the American Philatelic Center in Bellefonte, Pennsylvania, on 21–25 June 2020.

For more information, contact the APS at education@stamps.org.

WOMEN'S SUFFRAGE THEME OF SOUTHEASTERN STAMP EXPO

Dawn R. Hamman, BU1831, ATA President

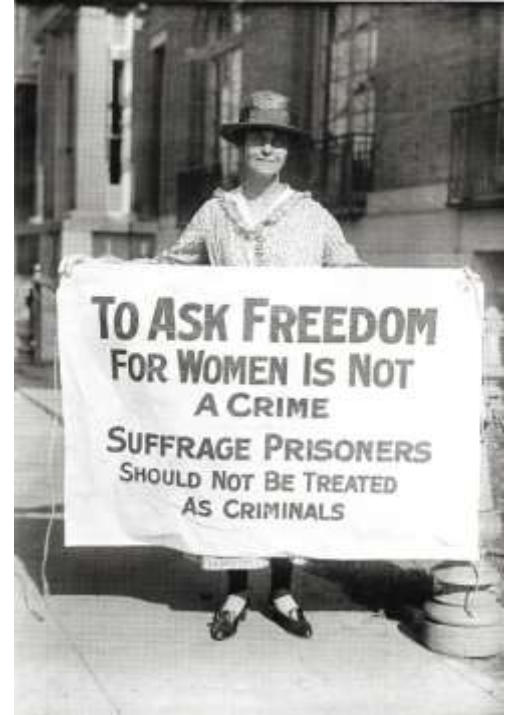
This year's Southeastern Stamp Exposition (SESE) held 31 January through 2-February in Atlanta, Georgia, featured speakers on women's suffrage, commemorating the 100th anniversary of the ratification of the 19th Amendment to the U.S. Constitution.

Speakers included Kris McIntosh of Arizona, speaking on events leading up to the vote. Warachal Faison, M.D., president of the Ebony Society for Philatelic Events and Reflections (ESPER), gave a moving talk on the Black Americans involved in the movement, including Frederick Douglass. She read a speech Douglass gave, relating the struggles of Black Americans and suffragettes.

On Saturday afternoon, there was a reception for women leaders in philately, with decorations on the suffrage theme. Those honored included: Warachal Faison, president of ESPER; Dawn Hamman, ATA president; Jennifer Miller, ATA executive director; Nancy Clark, a founder of SESE; Kathy Johnson, exhibitor and chief judge; and Elizabeth Hisey, chair of the Committee on Accreditation of National Exhibitions and Judges (CANEJ).



Suffrage postcard



The ATA booth was a busy place throughout the show. A commemorative packet with a women's suffrage stamp and a reproduction postcard were given to visitors at the booth. A total of 17 new members were recruited.

The women's suffrage theme will continue this summer, as the ATA has decided to make it the focus of their booth and promotional efforts at the Great American Stamp Show in Hartford, Connecticut, on 20–23 August.

WOMEN IN PHILATELY

“Stamp collecting” involves the acquisition and storing of postage stamps, whereas “philately” pertains to the study of stamps and related material.

From its beginning, the stamp collecting hobby has been dominated by men. One of the initiatives that was recently announced by Robert Zeigler, president of the American Philatelic Society, is to find ways to increase the involvement of women in stamp collecting in general and in philatelic organizations in particular.

It occurs to me that the American Topical Association has a good start on this effort to increase women's participation. Although women only make up about 20 percent of the present ATA membership, the current ATA president, executive director, secretary, and one-third of its officers and board are women. In addition, the leaders of six ATA study units, including our own Biology Unit president are women.

ATA member Jean Wang from Toronto, Ontario, was recently appointed to Canada Post's 12-member Stamp Advisory Committee that chooses subjects for new Canadian issues. Dr. Wang is a grand award winning thematic exhibitor.

The highest recognition given by the ATA is the Distinguished Topical Philatelist award. Of the 122 recipients of this award during its 70-year history, 35 (29 percent) have been women. Women may be fewer, but they are involved at the top level in topical collecting.

Of course, the involvement of women is not nearly as high as it ought to be. There are some groups that are trying to correct this. One of them is Women Exhibitors (www.aape.org/weweb.asp). It currently has more than 100 members (some of them are men) who are organized to promote and encourage the participation of women in the area of philatelic exhibiting.

This year WE is holding their seventh **WE Festival** at Chicagopex 2020 on Wednesday and Thursday 18–19 November before the show opens at the Westin Chicago Northwest Hotel in Itasca, Illinois. Everyone, women and men, is welcome to attend. The event will include several hours of seminars for beginning, advanced, and future exhibitors, as well as many social activities. It will be a great way to learn more about philately, specifically exhibiting, and meet others in the hobby.

GREAT AMERICAN STAMP SHOW

Our parent organization, the American Topical Association, will hold its annual philatelic exhibition in cooperation with the American Philatelic Society (APS) and the American First Day Cover Society (AFDCS) on 20–23 August 2020, at the **Connecticut Convention Center** in Hartford, Connecticut, in what is being called “The Great American Stamp Show.” It will be by far the largest national stamp and postal history show in the United States this year. More than 75 dealers are expected.



The ATA portion of the exhibition will continue to be called the National Topical Stamp Show (NTSS), but it will be a subsection of the overall exhibition. The NTSS will host all the thematic, topical, and display type exhibits. The APS portion will feature traditional exhibits, and the AFDCS section will host the first day cover exhibits.

As each organization's exhibition is a World Series of Philately event, each will present its own set of awards (grand, reserve grand, single frame grand, and most popular). Special awards such as the WE Sterling Achievement Medal will be spread across all three groups. The organizers are expecting more than 800 frames of exhibits. Several rare postal items will be on display including the famous “Inverted Jenny” air mail error stamp.

The total quantity of competitive exhibits among all three organizations is limited to 120 with 30 being the single frame limit. Single frame entries in particular will probably be closed before the 15 April entry deadline and others will go on waiting list, so it is important for exhibitors to get their applications in as soon as possible.

As is usual at this annual event, there will be a multi-session public auction. The U.S. Postal Service is a co-sponsor and they will have a large retail booth at the show. It is possible that there will be a first day of issue ceremony for a new U.S. stamp, but the USPS has not released its plans yet.

ATA events include its **annual general meeting** on Friday, 1:00–2:30 PM; President's Reception, Friday evening; Hobby Honors Banquet, Saturday evening; informal nights out; and a full-day tour on Monday.

Admission to the show is **free** and everyone is invited to the family-friendly event. In conjunction with the bourse and exhibition, there will youth activities and the show will host dozens of seminars and meetings of several societies. Both the ATA and the **Biology Unit** will hold their **annual general meetings** at the show. The schedule is still in the planning stage. Check the APS website (www.stamps.org/great-american-stamp-show) for the latest details.

EVENT CALENDAR

Event	Dates	Location
Garfield-Perry March Party	6–8 March 2020	Holiday Inn Strongsville, Strongsville, OH
St. Louis Stamp Expo	27–29 March 2020	St. Louis Renaissance Airport Hotel, St. Louis, MO
WESTPEX	24–26 April 2020	San Francisco Airport Marriott, Burlingame, CA
Plymouth Show	25–26 April 2020	Hellenic Cultural Center, Westland, MI
Philatelic Show	1–3 May 2020	Boxboro Regency, Boxborough, MA
LONDON 2020	2–9 May 2020	Business Design Centre, Islington, London, England
PIPEX	8–10 May 2020	Holiday Inn Portland Airport, Portland, OR
ROPEX	15–16 May 2020	Greater Canandaigua Civic Center, Canandaigua, NY
Rocky Mountain Stamp Show	22–24 May 2020	Arapahoe County Fairgrounds, Aurora, CO
NAPEX	5–7 June 2020	McLean Hilton at Tyson's Corners, McLean, VA
COLOPEX	12-13 June 2020	St. Andrew-Nugent Parish Hall, Columbus, OH
Royal*2020*Royale	19–21 June 2020	Fredericton Inn, Fredericton, NB
APS Summer Seminar	21–25 June 2020	American Philatelic Center, Bellefonte, PA
OKPEX	26–27 June 2020	Reed Conference Center, Midwest City, OK
Minnesota Stamp Expo	17–19 July 2020	Crystal Community Center, Crystal, MN
INDONESIA 2020	6–11 August 2020	Nusantara Building, Jakarta, Indonesia
Great American Stamp Show	20–23 August 2020	Connecticut Convention Center, Hartford, CT
BALPEX	4–6 Sep 2020	Baltimore Hunt Valley Inn, Baltimore, MD
SEAPEX	11–13 September 2020	Tukwila Community Center, Tukwila, WA
Omaha Stamp Show	12–13 September 2020	Metro Community Center, Omaha, NE
MILCOPEX	25–27 September 2020	Crowne Plaza Milwaukee Airport, Milwaukee, WI
INDYPEX	2–4 October 2020	Hamilton Co. Fairgrounds, Noblesville, IN
SESCAL	9–11 October 2020	Ontario Convention Center, Ontario, CA
NOJEX	23–25 October 2020	Meadowlands Hilton, East Rutherford, NJ
Filatelic Fiesta	14–15 November 2020	Santa Clara County Fairgrounds, San Jose, CA
CHICAGOPEX	20–22 November 2020	Westin Chicago Northwest, Itasca, IL
FLOREX	4–6 December 2020	Osceola Heritage Park Events Center, Kissimmee, FL
Southeastern Stamp Expo	29–31 Jan 2021	Hilton Atlanta Northeast, Norcross, GA
Sarasota National Show	7–9 Feb 2021	Municipal Auditorium, Sarasota, FL
IPEX	17–20 Mar 2021	Intl Convention Center, Cape Town, South Africa
IBRA 2021	6–9 May 2021	Messe, Essen, Germany
WSP shows in bold		

PANGOLINS ON STAMPS OF THE WORLD

Dr. Indraneil Das, BU1857

[Ed. note: Dr. Das is a professor at the Institute of Biodiversity and Environmental Conservation at the Universiti Malaysia Sarawak. Another reference that relates to this article is: “Poaching May Doom the Shy, Elusive Pangolin” by Rachael Bale, in *National Geographic*, June 2019, pp. 78–101.]

Pangolins (comprising eight species from tropical and subtropical Africa and Asia) are members of the mammalian order Pholidota (Gaudin, 2009; Gaubert et al., 2018), and all are listed as “threatened” by the International Union for Conservation of Nature (IUCN) Red List (an international database of the world’s threatened plants and animals). Causes for their imperilment are various, and include hunting for food, and curiously, for their “scales,” an ingredient in certain Chinese traditional medicine. They also suffer from habitat loss and some are recorded as road-mortalities.

Fossil records reveal that the group had a wider distribution—one was discovered from the Lower Oligocene of North America between 33.9–23 million years ago (mya), and others from the Eocene (56–33.9 mya) of China and Germany (Gaudin et al., 2006). Living pangolins are toothless and are myrmecophages, meaning their diets consist of ants and termites. Their long tongue is coated with adhesive saliva aiding in the capture of these insects. There is evidence that extinct pangolins consumed plant matter.

The depictions of these animals on stamps starts in 1950, with an issue from Sarawak (now a state within Malaysia) as part of the King George VI definitive series (Sc#186). It shows a Sunda Pangolin (*Manis javanica*). To date, as many as 52 countries and postal authorities have issued stamps featuring the pangolin. An alphabetical list includes: Bangladesh, Belgian Congo, Botswana, Burundi, Cameroon, Central African Republic, China (Taiwan), Congo Democratic Republic (Zaire), Congo People’s Republic, Equatorial Guinea, French West Africa, Gabon, Gambia, Ghana, Great Britain, Guinea (Republic), Guinea-Bissau, Hong Kong, Indonesia, Ivory Coast, Kenya, Laos, Lesotho, Liberia, Macao, Madagascar, Malaysia, Mozambique, Namibia, Nepal, Nevis, Niger, Nigeria, Philippines, Rio Muni, Saint Thomas and Prince, Sarawak, Senegal, Sierra Leone, Singapore, Solomon Islands, South Africa, Swaziland, Tanzania, Togo, Uganda, United Nations (Geneva), United Nations (Vienna), Vietnam, Vietnam (North), Zambia, and Zimbabwe.

An observant reader will note that not all the entities listed host natural populations of pangolins. Some issues even feature species not found within their geographical boundaries. The philatelic releases were typically to highlight the world’s threatened species. The cutoff for entries in this listing was 20 October 2019.

Let us briefly describe these philatelic issues by species, starting with the **Asian species**.

Philippine Pangolin

The Philippine Pangolin, locally called “Balintong” (*Manis culionensis*), has the smallest distributional range. It is endemic to the island of Palawan in the Philippines, where it lives in forested habitats, as well as in adjacent grasslands. It is classified as endangered in the IUCN Red List, on account of hunting and habitat loss. All stamps featuring the Philippine Pangolin have been issued, unsurprisingly, by the **Republic of the Philippines**.

The first was released on 14 May 1979, with face value 5p (Sc#1408). The catalogue calls it an “anteater” and it is incorrectly captioned *Paramanis culionensis* (Fig. 1). The second stamp was issued on 12 August 1994, with face value 6p (Sc#2311c), which the catalogue and its caption calls a “Scaly Anteater,” one of its alternative names. It is also incorrectly captioned *Manis javanica*. The latest example, in a miniature sheet of four 15p stamps (Sc#3634c), was issued on 11 November 2015.



Fig. 1. *Manis culionensis*
Philippines 1979, Sc#1408

Indian Pangolin

The Indian Pangolin (*Manis crassicaudata*) has numerous vernacular names, depending on locality, one being “Bon Rui” (forest fish) in Bengali, on account of its scales. It is widespread in the Indian Subcontinent, from Pakistan to Peninsular India, and including Nepal and Sri Lanka. A forest and scrubland species, ranging from the lowlands to more than 2,000 m above sea level, it is threatened by hunting and habitat loss.

On 16 June 1991, **Bangladesh** issued a set of four stamps showing endangered animals. The face value 10t stamp (Sc#393) depicts an Indian Pangolin (Fig. 2). **Nepal** issued a strip of four mammal stamps on 31 August 2005, with the face value 10r stamp (Sc#762b) showing this species (Fig. 3). **Niger** showed the species in the selvage of a 3300fr souvenir sheet issued on 5 December 2016 (not yet catalogued). On 10 September 2013, **Saint Thomas and Prince Islands** issued a miniature sheet of four 25000d stamps one of which (Sc#2550a) depicts the species together with a lion.

Chinese Pangolin

The Chinese Pangolin (*Manis pentadactyla*), also called the Asian Pangolin, is distributed from north-eastern India, Nepal, Bhutan, Bangladesh, Myanmar, Vietnam, and southern China, including Hainan. It inhabits wet forests within its vast range, and is hunted for food as well as medicine. The scales, in particular, are in high demand for Chinese traditional medicine. The Chinese Pangolin features in the stamps of a number of nations.

On 16 April 2018, **Guinea-Bissau** issued a miniature sheet of five 640fr stamps (not yet catalogued) depicting critically endangered animals, one of which features a Chinese Pangolin. On 4 May 1982, **Hong Kong** issued a set of four animal stamps including a \$1 stamp (Sc#385) showing this species (Fig. 4).

Laos issued two stamps with this species (captioned *Panis auritas*) on 6 November 1969, with face values 15k (Sc#192) and 30k (Sc#193) (Fig. 5), and another as part of a set of fauna stamps on 15 August 1985, with a 10k face value (Sc#649) (Fig. 6).



Fig. 5. *Manis pentadactyla*
Laos 1969, Sc#193–93

On 14 April 1988, **Macao** issued a 3p stamp (Sc#564) as part of a set on wildlife protection (Fig. 7) picturing the Chinese Pangolin, and on 10 April 1995, a set of four 1.50p stamps (Sc#767–70) celebrating the World Wildlife Fund. On 27 May 2016, **Sierra Leone** issued a souvenir sheet with face value 24000le (Sc#3800) that shows this species in the margin, and on 30 August 2018, a miniature sheet of three 9800le stamps (not yet catalogued) with this species.

On 25 June 1971, **China (Taiwan)** issued a \$3 stamp (Sc#1718) showing this species as part of a set of four showing Taiwan animals (Fig. 8). On 4 April 2001, Taiwan issued a \$12 stamp (Sc#3356) as part of a set of four on children’s rhymes that



Fig. 2. *Manis crassicaudata*
Bangladesh 1991, Sc#393



Fig. 3. *Manis crassicaudata*
Nepal 2005, Sc#762b



Fig. 4. *Manis pentadactyla*
Hong Kong 1982, Sc#385



Fig. 6. *Manis pentadactyla*
Laos 1985, Sc#649



Fig. 7. *Manis pentadactyla*
Macao 1988, Sc#564

shows a stylized pangolin, and on 16 October 2014, a \$5 stamp (Sc#4197b) on a miniature sheet of six celebrating the centenary of the Taipei Zoo. On 24 June 1965, **North Vietnam** issued a 12xu stamp with this species (Sc#352) as part of a set of six showing wild animals (Fig. 9). An 800d stamp (Sc#3179) issued by **Vietnam** on 5 June 2003, as part of a set of four also shows this species (Fig. 10).



Fig. 8. *Manis pentadactyla*
Taiwan 1971, Sc#1718



Fig. 9. *Manis pentadactyla*
North Vietnam 1965, Sc#352



Fig. 10. *Manis pentadactyla*
Vietnam 2003, Sc#3179

Sunda or Malayan Pangolin

The Sunda Pangolin or Malayan Pangolin (*Manis javanica*) perhaps has the largest distribution of all Asian species of the Order, with its range including most of mainland southeast Asia, in addition to the islands of Sundaland, including Sumatra, Borneo, and Java. It is not only found in lowland forests, but also ventures into adjacent areas of scrubland and plantations.

Numerous countries and postal authorities have issued stamps that show this species. **Burundi** issued a 7500fr souvenir sheet (Sc#1130) for wildlife trade on 31 August 2012, that shows this species on the selvage, and on 21 December 2012, they issued a miniature sheet comprising four stamps with one showing this species (Sc#1192c), and a 7500fr souvenir sheet with the species on the selvage (Sc#1217). On 12 October 2015, the **Central African Republic** issued a miniature sheet of four 900fr stamps depicting disappearing animals with one stamp showing a Sunda Pangolin (Mi#5651). On 18 July 2016, the C.A.R. issued another miniature sheet of four 750fr stamps of disappearing animals with one stamp showing the species (Mi#6281).

On 10 October 2018, **Great Britain's** Royal Mail issued personalized stamps with a face value £6.70 (sold for £15.95) as a "commemorative sheet" of 10 first class rate stamps with attached labels (not yet catalogued). These stamps were issued to raise funds for United For Wildlife, a project created by The Royal Foundation of The Duke and Duchess of Cambridge and The Duke of Sussex. This species is one of two pangolins shown on the stamps.



Fig. 11. *Manis javanica*
Indonesia 1956-58, Sc#429 & 451-52

On 4 April 2017, **St. Vincent** issued a miniature sheet of four stamps based on images taken by the acclaimed National Geographic photographer Joel Sartore (<https://www.joelsartore.com/>) with one stamp showing this species (Sc#4099b). Between 1956 and 1958, **Indonesia** issued stamps with face values 35s (Sc#429), 40s (Sc#451), and 45s (Sc#452) (Fig. 11) that depict the Malayan Pangolin.

On 4 January 1979, **Malaysia** issued a set of stamps showing fauna including one with face value of 75c (Sc#178) depicting this species (Fig. 12). Also, on 28 July 2019, they issued a set of three 60c stamps, one of which shows the Malayan Pangolin (not yet catalogued) (Fig. 13). **Mozambique** issued a 350m souvenir sheet on 10 August 2016, showing this species (not yet catalogued).



Fig. 12. *Manis javanica*
Malaysia 1979, Sc#178



Fig. 13. *Manis javanica*
Malaysia 2019, no cat

On 3 January 1950, **Sarawak** issued a set of 15 stamps with the 10c value showing a Sunda Pangolin (Sc#186), though the catalogue and the caption calls it a “Scaly Anteater” (Fig. 14). On 6 June 2007, **Singapore** issued a set of stamps showing mammals. The \$5 stamp depicts a Malayan Pangolin (Sc#1258) (Fig. 15) that was also issued in an accompanying “collectors sheet” (Sc#1259a). This stamp has three other varieties with imprinted dates of “2007B,” “2007C,” and “2007D.” Singapore also issued a set of four and a souvenir sheet of four stamps on 13 July 2013, that include this species on a 1st Class (26c) stamp (Sc#1608 & Sc#1613a).



Fig. 14. *Manis javanica*
Sarawak 1950, Sc#186



Fig. 15. *Manis javanica*
Singapore 2007, Sc#1258

The **African species** too have had their share of appearances on philatelic releases.

Giant Pangolin

The largest living pangolin, the Giant Pangolin (*Smutsia gigantea*), inhabits the equatorial region of Africa from Uganda to western Africa. The maximum weight attained of this animal is 33 kg (72 lb). This species is associated with savannahs as well as lowland rainforests.



Fig. 16. *Smutsia gigantea*
Central African Republic 1985, Sc#J13–15

Stamps that commemorate this giant among the pangolins have been issued by a number of nations. On 21 December 2012, **Burundi** issued a miniature sheet comprising four stamps showing pangolins. One of these stamps (Sc#1192b) depicts a Giant Pangolin, captioned “*Manis gigantea*.” On 25 July 1985, **Central African Republic** issued a set of three postage due stamps shaped as inverted triangles stamps with face values of 5fr (Sc#J13), 20fr (Sc#J14), and 30fr (Sc#J15) (Fig. 16).

On 17 April 1985, **Gabon** issued a set of four stamps and a souvenir sheet (Sc#584a) depicting four native wildlife species. The 125fr value (Sc#583) shows a Giant Pangolin (Fig. 17). On 28 December 1987, the **Republic of Guinea** issued a set of six wildlife stamps. The 400fr denomination (Sc#1073) was issued in an unlisted souvenir sheet that shows this species in the selva. On 25 September 1995, Guinea issued a set of six mammal stamps with a 500fr value stamp (Sc#1283) showing this pangolin.



Fig. 17. *Smutsia gigantea*
Gabon 1985, Sc#583



Fig. 18. *Smutsia gigantea*
Kenya 1966, Sc#34



Fig. 19. *Smutsia gigantea*
Nigeria 2001, Sc#735

On 12 December 1966, **Kenya** issued a set of 16 animal stamps with the 10sh denomination (Sc#34) showing a Giant Pangolin (Fig. 18). **Nigeria** issued a set of fauna stamps on 25 June 2001, including a 40n face value (Sc#735) with this species (Fig. 19).

On 1 June 1964, **Rio Muni** issued a set of three stamps for child welfare, two of which, the 25c (Sc#32) and 1p (Sc#34) (Fig. 20), depict the Giant Pangolin. Rio Muni issued another set of four stamps on 23 November 1966, for Stamp Day including two values, 40c (Sc#60) and 4p (Sc#62) with this species (Fig. 21).



Fig. 20. *Smutsia gigantea*
Rio Muni 1964, Sc#32 & 34



Fig. 21. *Smutsia gigantea*
Rio Muni 1966, Sc#60 & 62



Fig. 22. *Smutsia gigantea*
South Africa 2016, Sc#1556d

On 26 September 2016, the **Republic of South Africa** issued a miniature sheet on the occasion of the 17th meeting of the Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) held in Johannesburg. This sheet (Sc#1556) shows the four African pangolin species, where the Giant Pangolin stamp (Sc#1556d) is for the “International Small Letter” rate (Fig. 22). On 12 December 2016, the **Solomon Islands** issued a miniature sheet of four \$12 stamps for this same CITES conference. One stamp (Sc#2181b) features a Giant Pangolin.



Fig. 23. *Smutsia gigantea*
Uganda 1992, Sc#1057

On 8 May 1984, **Tanzania** issued a souvenir sheet of two stamps depicting Rare Species of Zanzibar. The 20sh stamp (Sc#262b) shows a Giant Pangolin. On 25 September 1992, **Uganda** issued a set of eight stamps showing wild animals with the 250sh denomination (Sc#1057) picturing this species (Fig. 23).

Ground or Temminck’s Pangolin

The Ground Pangolin or Temminck’s Pangolin (*Smutsia temminckii*), inhabits southern and eastern Africa, and is known from lowland savannah woodlands, inhabiting deep burrows composed of semi-spherical chambers. The species is arguably the most often represented in philatelic material, as the following listing will attest.

On 6 July 1977, **Botswana** issued a set of five stamps for endangered wildlife. The 25t face value (Sc#185) shows a pair of Ground Pangolins (Fig. 24). Botswana issued a set of 18 wild animal stamps on 3 August 1992, including one with face value 12t (Sc#523) (Fig. 25). This design was reissued and revalued 10t (Sc#594A) on 1 August 1994. On 21 December 2012, **Burundi** issued a miniature sheet of four stamps, including the Ground Pangolin on two stamps with face values 1180fr (Sc#1192a) and 3000fr (Sc#1192d).



Fig. 24. *Smutsia gigantea*
Botswana 1977, Sc#185



Fig. 25. *Smutsia gigantea*
Botswana 1992, Sc#523



Fig. 26. *Smutsia gigantea*
Congo D.R. 2000, Sc#1510



Fig. 27. *Smutsia gigantea*
Mozambique 1976, Sc#557

On 28 February 2000, the **Congo Democratic Republic (Zaire)** issued a set of six stamps depicting African flora and fauna with one 3fr stamp (Sc#1510) showing a Ground Pangolin (Fig. 26). The **Great Britain** personalized commemorative sheet issued on 10 October 2018, and referenced above, also shows this species.

On 22 May 2000, **Lesotho** issued a miniature sheet of six 4m denomination stamps at the London Stamp Show, one of which depicted a Ground Pangolin. This sheet has not received a Scott number, probably because of its limited distribution. Lesotho issued a miniature sheet of four stamps with animals of Africa on 17 May 2004, one of which (Sc#1342c) shows this species.

In January 1976, **Mozambique** issued a set of 12 animal stamps including a 1.50e stamp (Sc#557) with a Ground Pangolin (Fig. 27). On 30 January 2010, they issued a miniature sheet of six 33m stamps (Sc#1951a–f) and a 175m souvenir sheet (Sc#1978) showing this species. On 30 August 2011, Mozambique issued a miniature sheet with six stamps showing pangolins and armadillos including two 16m stamps (Sc#2343a & Sc#2343d) and one 66m stamp (Sc#2343e) showing a Ground Pangolin. This issue also included a 175m souvenir sheet (Sc#2373) that shows the species on both the stamp and the selva. Finally, on 25 March 2013, they issued a horizontal strip of four stamps (Sc#2825) and a 175m souvenir sheet (Sc#2826) with this species. In addition, two each of the four stamps were issued in a miniature sheet of eight (Sc#2825e).

On 5 September 2001, **Namibia** issued a miniature sheet of ten covering fauna of the country titled “Fauna & Flora from the Central Highlands.” One stamp (Sc#987i) shows a Ground Pangolin. On 14 March 2014, they issued another miniature sheet of six titled “Nocturnal Animals of Namibia,” with one stamp (Sc#1280d), showing this species. **Senegal** issued a set of five wild animal stamps on 28 October 1994, with the 175fr face value stamp (Sc#1096) depicting this species (Fig. 28).



Fig. 28. *Smutsia gigantea*
Senegal 1994, Sc#1096

On 27 May 2016, **Sierra Leone** issued a miniature sheet of four 6000le stamps for a national park in Zimbabwe with one stamp (Sc#3782a) showing a Ground Pangolin. On the same date, they issued a 24000le souvenir sheet for a national park in Zambia (Sc#3800) with the animal appearing on the selva. On 12 May 2001, the **Republic of South Africa** issued a souvenir sheet for the Kgalagadi Transfrontier Park (Sc#1254a), where a small depiction of the species appears in the margin. Also, on the previously mentioned miniature sheet with the four African pangolin species issued on 26 September 2016, the Ground Pangolin appears on one of the stamps (Sc#1556b).

On 1 October 1980, **Swaziland** issued a set of four wildlife stamps with the Ground Pangolin on the 50c value (Sc#372). On 15 December 2016, **Togo** issued a 3500fr souvenir sheet (Mi#7813) for the Johannesburg CITES conference showing the species on the selva. On 10 October 2013, the United Nations Postal Administration at **Geneva** issued a set of four 1.40fr stamps for endangered species one of which (Sc#572) shows this pangolin. On 24 September 2016, the UNPA at the **Vienna** office issued a set of four €1.70 stamps for the Johannesburg CITES conference with this species featured on one of the stamps (Sc#596c).

On 3 January 1975, **Zambia** issued a set of 14 stamps depicting animals and various scenes with the 10n stamp (Sc#142) showing a Ground Pangolin. On 5 December 1988, they issued a set of four stamps showing endangered species with the 2k value (Sc#453) featuring this pangolin (Fig. 29). On 15 April 1997, **Zimbabwe** issued a set of six stamps commemorating the 10th CITES convention with one the \$1.70 value stamp (Sc#776) showing a Ground Pangolin (Fig. 30).



Fig. 29. *Smutsia gigantea*
Zambia 1988, Sc#453



Fig. 30. *Smutsia gigantea*
Zimbabwe 1997, Sc#776

Tree Pangolin

The Tree Pangolin (*Phataginus tricuspis*) is found in equatorial Africa from Guinea and Sierra Leone to central Africa, eastwards to Kenya and Tanzania, and southwards to Angola and Zambia. It is partially arboreal and found in lowland rainforests, as well as more dry areas such as savannahs.

Stamps depicting this unusual and beautiful animal has been issued by several countries. On 15 October 1959, **Belgian Congo** issued a set of 12 stamps depicting animals with face value 8fr stamp (Sc#316) showing a Tree Pangolin, though it is captioned *Smutsia gigantea* (Fig. 31). On 20 August 2013, **Burundi** issued a miniature sheet of four stamps, one of which with face value 3000fr (Sc#1402c) shows the species.

Republic of Cameroon issued a set of three stamps on 20 July 1981, with the 100fr face value (Sc#693) showing a Tree Pangolin. On 12 July 2001, **Central African Republic** issued a miniature sheet of nine 300fr stamps showing African wildlife with one showing a Tree Pangolin, but captioned *Manis temmincki*.

In December 1984, the **Congo People's Republic** issued a set of three fauna stamps with the 30fr value (Sc#720) showing a Tree Pangolin (Fig. 32). In 2006, they issued a set of four animal stamps with this species on the 50fr value (Sc#1277).



Fig. 31. *Phataginus tricuspis*
Belgian Congo 1959, Sc#316



Fig. 32. *Phataginus tricuspis*
Congo D.R. 1984, Sc#720



Fig. 33. *Phataginus tricuspis*
Equatorial Guinea 2016, Sc#320c



Fig. 34. *Phataginus tricuspis*
Fr. West Africa 1955, Sc#63

Equatorial Guinea issued a strip of four flora and fauna stamps in 2016, with the 700fr value (Sc#320c) showing a Tree Pangolin (Fig. 33). On 2 May 1955, **French West Africa** issued two stamps for wildlife protection with the 8fr value (Sc#63) showing this species (Fig. 34).

The **Gambia** issued a miniature sheet of six 8d stamps on 16 July 2001, titled “Animals of Africa,” with one stamp (Sc#2491e) showing a Tree Pangolin. On 25 October 1990, **Ghana** issued a miniature sheet of 20 40ce stamps titled “African Tropical Rain Forest” with one (Sc#1224p) that show this species. On 1 May 2000, they issued another miniature sheet of six 1600ce stamps titled “Fauna and Flora of Ghana” one of which (Sc#2173b) shows this species.

On 2 April 1997, **Liberia** issued a miniature sheet of 12 wildlife stamps denominated 50c with one stamp (Sc#1240c) showing a Tree Pangolin. Also, on 2 March 2015, they issued a \$350 souvenir sheet (Sc#3044) as part of a set on mammals showing this species, but captioned *Manis gigantea*. On 7 April 1999, **Madagascar** issued a set of six 1950fr fauna stamps with one stamp (Sc#1410) showing this species. The Tree Pangolin is also shown on the CITES miniature sheet (Sc#1556c) from **Republic of South Africa** issued on 26 September 2016, mentioned previously.

On 30 June 1993, **Tanzania** issued a miniature sheet of 12 titled “Wildlife of the Plains of Tanzania” with one of the 100sh stamps (Sc#1001h) depicting a Tree Pangolin. In 1996, this sheet was reissued with an overprint (Sc#1531) to commemorate both the 34th World Scout Conference held in Oslo, Norway, 8–12 July 1996, and the International Scout Camp in Thailand, 25–31 March 1996. According to the catalogue, the issue date for this overprint was 16 December 1996. However, I have a first-day cancellation on cover in my collection, dated 16 October 1996, from Dar es Salaam.

On 15 June 2010 (the *Scott Catalogue* has a 6 March issue date), **Togo** issued a strip of four and miniature sheet of four 550fr stamps (Sc#2074a–d) and a 2000fr souvenir sheet (Mi#3458) showing the Tree Pangolin. This set was also released in a miniature sheet of eight featuring two each of these stamps with two labels (Sc#2074e). Togo released another set showing this species on 30 August 2013, including a miniature sheet of three 950fr stamps (Mi#5267–69) and a 2500fr souvenir sheet (Mi#5270).

Long-tailed or African Black-bellied Pangolin

The Long-tailed Pangolin (*Phataginus tetradactyla*), also called the African Black-bellied Pangolin, is an arboreal species found in western and central Africa, from the Congo region, as well as Guinea, inhabiting moist, riverine and swamp forests, and also agricultural areas.

Stamps of this species have been issued by several countries. These include a miniature sheet of twelve 5d stamps titled “Animals of West Africa” issued by **Gambia** on 5 April 1993, which depicts this pangolin on one stamp (Sc#1359c). Also, on 5 April 1993, Gambia issued a set of four stamps (Sc#1362–65) plus a 20d souvenir sheet (Sc#1366) showing the Long-tailed Pangolin. On 16 July 2001, Gambia issued a 25d souvenir sheet (Sc#2494) featuring this species.

On 12 March 1983, **Ivory Coast** issued a set of four stamps featuring animals with the 35fr face value (Sc#669) showing the Long-tailed Pangolin (Fig. 35). On 31 May 1999, **Sierra Leone** issued a miniature sheet of six 900le stamps, one of which shows this species (Sc#2204c). The Black-bellied Pangolin is also shown on the CITES miniature sheet (Sc#1556a) from **Republic of South Africa** issued on 26 September 2016, mentioned previously. On 10 October 1989, **Zimbabwe** issued a set of six stamps featuring endangered species with the 35c denomination (Sc#597) showing this species (Fig. 36). On 2 January 1990, Zimbabwe issued another set of six animal stamps with this species shown on the 4c value (Sc#617 & Sc#617a).



Fig. 35. *Phataginus tetradactyla* Ivory Coast 1983, Sc#669



Fig. 36. *Phataginus tetradactyla* Zimbabwe 1989, Sc#597

This essay covers members of the mammalian order Pholidota on stamps of the world. All eight species—four each from Asia and Africa—have been depicted on more than 140 stamps. The large quantity of stamps issued in the last decade perhaps corresponds to the heightened awareness on these reportedly most traded mammalian group.

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SQUEAKY CURTAIN

Frank Jacobs

[Ed. note: This article is based on “Squeaky Curtain Divides Europe’s Mice in East and West,” by Frank Jacobs, in a “Strange Maps” article dated 27 November 2019. (<https://bigthink.com/strange-maps/squeaky-curtain?rebellitem=2#rebellitem2>)]

If you’re a mouse, Europe is still divided in two, along a divide strangely reminiscent of the Iron Curtain. The house mouse diverged into two subspecies depending on which humans they followed. The Western and Eastern European house mice can interbreed, but the results are, well, mixed. The continent remains divided between Eastern and Western mice except for a narrow contact zone where hybrids eek out a living

It has been thirty years since the fall of the Berlin Wall, and the Iron Curtain is now a distant and dimming memory. But that is only true if you are a human. In the mouse world, Europe is still divided in East and West. As this map shows, the line that separates both halves of the continent is strangely similar to the Cold War frontier between capitalism and communism.

The Squeaky Curtain starts at the Baltic Sea, cutting through Denmark, Germany and Austria before almost making it to the Adriatic. Instead, the line shadows the formerly Yugoslav coast before swerving east, keeping the southern Balkans in “the West,” finally diving into the Black Sea.

West of the line lives the Western European House Mouse (*Mus musculus* ssp. *domesticus*). To the East, roams the Eastern European House Mouse (*Mus musculus* ssp. *musculus*). On average, the eastern mouse is smaller and browner, the western one generally a bit sturdier and usually grey. Both subspecies branched from the same ancestor, some 500,000 years ago in Asia.



Image: Macholán, M., Baird, S.J., Munclinger, P. et al. Genetic conflict outweighs heterogametic incompatibility in the mouse hybrid zone?. BMC Evol Biol 8, 271 (2008) doi:10.1186/1471-2148-8-271



M. m. ssp. *domesticus*

Faroe Islands, 2013, Sc#606

What ultimately separated house mice into these two subspecies are the humans they chose to follow. The ones moving through Asia’s interior via Russia towards Eastern Europe turned into Eastern European House Mice. The ones aiming for the Mediterranean, hitchhiking on ships to reach Western Europe (and eventually also the Americas and Australia) became Western European House Mice.

When the two subspecies met up again in Europe, is unclear. “It has been suggested that source populations first met in the southern region of the current hybrid zone, and only more recently in central and northern Europe, with progressive contact from south to north similar to a zipper being pulled up through Europe,” write the authors of *Genetic conflict outweighs heterogametic incompatibility in the mouse hybrid zone?*, a scientific paper that examines interbreeding between Western and Eastern European House Mice (and the origin of this map).

“Progressive contact” is not necessarily a euphemism for doing the dance with two tails. The long genetic separation means the subspecies have drifted far apart. While males of either subspecies generally do not care whom they mate with, females prefer the company of males of the same subspecies. That limits interbreeding. And hybrid couples usually produce fewer offspring than “pure” Eastern

or Western ones. Both factors help explain why interbreeding only occurs in a relatively narrow and stable hybrid zone no more than 10 to 20 km wide.

The reduced capacity for interbreeding may be an indication that the two subspecies are in the process of becoming two separate species, entirely unable to interbreed. Only at the centre of the hybrid zone do hybrid mice occur in significant numbers relative to their Eastern and Western forebears. But not everything is gloomy for the hybrids: they are more resistant to parasite-borne diseases than both Eastern and Western European House Mice.

WEDDING SET

The latest in a series of sets designed to accommodate wedding correspondence is planned for release on 2 April 2020, by the U.S. Postal Service. The **Contemporary Boutonniere** is a Forever rate (55c) stamp similar in design to the new two-ounce Garden Corsage stamp. Mailers can use it for wedding RSVP cards. It is also perfect for party invitations, thank-you notes, announcements, birthday cards, and other occasions when a beautiful stamp is fitting. The stamp features a photograph of an arrangement of a burgundy mini-cymbidium orchid bloom, a succulent, and a touch of green hydrangea, accented with loops of variegated lily grass.

The **Garden Corsage** is a new two-ounce rate (70c) stamp. This stamp can accommodate the weight of heavy invitations for birthdays, weddings, anniversaries and other celebrations, oversize greeting cards for all occasions, and mailings such as small gifts that require extra postage. The stamp features a photograph of a corsage containing a spray of peach roses and a pink ranunculus, accented with deep-pink heather and seeded eucalyptus. A cream-colored lace ribbon entwines the flowers. The Garden Corsage is similar in design to the Contemporary Boutonniere Forever stamp, and the two form a natural pair.



Set	Issue Dates	Denom.	Cat. No.
Love Roses	July/August 1988	25c & 45c	Sc#2378-79
Love Globe & Parrots	9 May 1991	29c & 52c	Sc#2535-36
Love Bouquets	14 February 1994	29c & 52c	Sc#2814-15
Love Cherubs	12 May 1995	32c & 55c	Sc#2957-60
Love Swans	4 February 1997	32c & 55c	Sc#3123-24
Love Flower Hearts	28 January 1999	33c & 55c	Sc#3274-75
Love Letter Roses	14 February 2001 19 November 2001	34c & 55c 57c	Sc#3497-98 Sc#3551
Love Contemporary Art	16 August 2002	37c & 60c	Sc#3657-58
Wedding Doves	1 March 2006	39c & 63c	Sc#3998-99
Wedding Hearts	27 June 2007	41c & 58c	Sc#4151-52
Wedding Hearts	10 June 2008	42c & 59c	Sc#4271-72
Wedding Rings & Cake	1 May 2009	44c & 61c	Sc#4397-98
Wedding Roses & Cake	April 2011	(44c) & 64c	Sc#4520-21
Wedding Cake	20 January 2012	65c	Sc#4602
Wedding Cake	18 January 2013	66c	Sc#4735
Wedding Flowers	11 April 2013	(46c) & 66c	Sc#4764-65
Wedding Cake	22 February 2014	70c	Sc#4867
Wedding Cake	1 June 2015	(71c)	Sc#5000
Boutonniere & Corsage	2 May 2017	(49c) & (70c)	Sc#5199-5200

The modern designs of the boutonniere and corsage both were arranged by floral designer Carol Caggiano and photographed by Renée Comet. Art director Ethel Kessler designed the stamps.

These sets of two designed for wedding invitations and replies started with the 25c and 45c Love Roses set issued on 4 July and 8 August 1988 (Sc#2378-79). The table at left contains information about the other sets with this purpose.



BOTANY

Editor

Christopher E. Dahle, BU1269

New Listings



Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
ANDORRA (Spanish) 2019 July 8 (Holly) (Single)				
465	70c	Holly, <i>Ilex aquifolium</i>	Aquifoliaceae	Fr V A
ANTIGUA 2019 June 1 (Roses) (MS/6)				
3552a	\$3	Pink Roses, <i>Rosa floribunda</i>	Rosaceae	Fl A MS
3552b	\$3	White Roses, <i>Rosa floribunda</i>	Rosaceae	Fl A MS
3552c	\$4	Yellow Rose, <i>Rosa floribunda</i>	Rosaceae	Fl A MS
3552d	\$4	Pale yellow Roses, <i>Rosa floribunda</i>	Rosaceae	Fl A MS
3552e	\$5	White Roses, <i>Rosa floribunda</i>	Rosaceae	Fl A MS
3552f	\$5	Pink Roses, <i>Rosa floribunda</i>	Rosaceae	Fl A MS
2019 June 1 (2019 World Stamp Exhibition, Wuhan) (MS/4 &SS/1)				
3553a	\$4	Cherry blossoms, <i>Prunus mume</i> (w/ pagoda)	Rosaceae	Fl B MS
3553b	\$5	Cherry blossoms, <i>Prunus mume</i> (w/ lanterns)	Rosaceae	Fl B MS
3553c	\$6	Cherry blossoms, <i>Prunus mume</i>	Rosaceae	Fl A MS
3553d	\$7	Cherry trees, <i>Prunus mume</i> (w/ pagoda & lake)	Rosaceae	Fl B MS
3554	SS \$14	Cherry trees, <i>Prunus mume</i> (w/ pagoda)	Rosaceae	Fl B SS
ARUBA 2019 August 30 (Medicinal Plants) (Set/4)				
632	90c	Oregano, <i>Origanum vulgare</i>	Lamiaceae	Fl V A
633	130c	Peppermint, <i>Mentha spicata</i>	Lamiaceae	Fl V A
634	220c	Senna, <i>Senna alexandrina</i>	Fabaceae	Fl V A
635	500c	Lemongrass, <i>Cymbopogon citratus</i>	Poaceae	Fl V A
AUSTRALIA 2019 October 8 (Seeds of Endangered Species) (Set/3 & 3ea Bklt/10)				
5021	\$1	<i>Rytidosperma clelandii</i> (perf 14 ³ / ₄)	Poaceae	Fr A
5022	\$1	Snow Heath, <i>Epacris petrophila</i> (perf 14 ³ / ₄)	Ericaceae	Fr A
5023	\$1	<i>Petrophile latericola</i> (perf 14 ³ / ₄)	Proteaceae	Fr A
5024	\$1	<i>Rytidosperma clelandii</i>	Poaceae	Fr A
5024a		Bklt/10 (Sc#5024) (die cut 11 ¹ / ₄ syncopated) (s/a)		
5025	\$1	Snow Heath, <i>Epacris petrophila</i>	Ericaceae	Fr A
5025a		Bklt/10 (Sc#5025) (die cut 11 ¹ / ₄ syncopated) (s/a)		
5026	\$1	<i>Petrophile latericola</i>	Proteaceae	Fr A
5026a		Bklt/10 (Sc#5026) (die cut 11 ¹ / ₄ syncopated) (s/a)		
AUSTRIA 2019 September 19 (Kamptal Controlled Wine Region) (Single)				
2816	80c	Kamptal Grapes, <i>Vitis vinifera</i>	Vitaceae	Fr B
BAHAMAS 2019 September 5 (Native Plants definitives) (Set/16)				
1491	5c	Apple Cactus, <i>Cereus</i> (= <i>Harrisia</i>) <i>brookii</i>	Cactaceae	Fl A
1492	10c	<i>Agave inaguensis</i>	Asparagaceae	Fl A
1493	15c	<i>Euphorbia gymnonota</i>	Euphorbiaceae	Fl A
1494	20c	<i>Euphorbia longinsulicola</i>	Euphorbiaceae	Fl A
1495	25c	<i>Encyclia fehlingii</i>	Orchidaceae	Fl A
1496	30c	Bahama Hummingbird Bush, <i>Pavonia bahamensis</i>	Malvaceae	Fl A

BAHAMAS (continued)

1497	40c	<i>Lepidaploa arbuscula</i>	Asteraceae	Fl A
1498	50c	Bahama Virgin's Bower, <i>Clematis plukenetii</i>	Ranunculaceae	Fl A
1499	50c	Bahama Milk Pea, <i>Galactia bahamensis</i>	Fabaceae	Fl A
1500	50c	<i>Wedelia bahamensis</i>	Asteraceae	Fl A
1501	50c	<i>Cyperus correllii</i>	Cyperaceae	Fl A
1502	80c	<i>Ernodea gigantea</i>	Rubiaceae	Fl A
1503	\$1	Pineland Aster, <i>Symphotrichum lucayanum</i>	Asteraceae	Fl A
1504	\$2	<i>Gochnatia</i> (= <i>Anastraphia</i>) <i>paucifloscula</i>	Asteraceae	Fl A
1505	\$5	Moujean Tea, Bahamas Berry, Pineapple Verbena, <i>Nashia inaguensis</i>	Verbenaceae	Fl A
1506	\$10	Florida's Dancing Lady, <i>Tolumnia bahamensis</i> (= <i>sasseri</i>)	Orchidaceae	Fl A

BELARUS**2019 June 27** (Lichens & Insects) (Set/3 & SS/6) [see Vol. 68(3) p.186]

1142	(48k)	Common Orange Lichen, Yellow Scale, <i>Xanthoria parietina</i>	Teloschistaceae	V A
1143	(1.46r)	Tree Lungwort, <i>Lobaria pulmonaria</i>	Lobariaceae	V A
1144	(1.68r)	Devils Matchstick, British Soldier, <i>Cladonia floerkeana</i>	Cladoniaceae	V A
1444a		SS/6 (2ea Sc#1142–44)		

BENIN**2005–08 (Surcharges)**

1337	175fr	<i>Phalaenopsis</i> 'Fuscata' (Sc#976 surch)	Orchidaceae	Fl A
1339	175fr	<i>Lithops helmutii</i> (Sc#1004 surch)	Aizoaceae	V A

1989? (ovpt "COLIS / POSTAUX")

Q19	500fr	Manioc, <i>Manihot esculenta</i> (Sc#357 ovpt/surch)	Euphorbiaceae	V A
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BOLIVIA**2012** (Fruits Type of 2011)

1450a	1.50b	Oranges, <i>Citrus sinensis</i> (inscr. "2012")	Rutaceae	Fr A
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2012–13 (Fruits Type of 2011 w/ different font)

1544A	1.50b	Oranges, <i>Citrus sinensis</i> (inscr. "2012")	Rutaceae	Fr A
1544B	1.50b	Oranges, <i>Citrus sinensis</i> (inscr. "2013")	Rutaceae	Fr A

2018 (Endangered Flora Type 2013) (*Agencia Boliviana de Correos* ovpt)

1564A	10.50b	Yareta, <i>Azorella compacta</i> [see Vol 63(2) p.83]	Apiaceae	Fr A
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BOSNIA & HERZEGOVINA (Croat) **2019 May 22** (Myths & Flora: Cerberus & Wolf's-bane) (SS/1)

393	SS 5m	Wolf's-bane, <i>Aconitum lycoctonum</i> (also on R margin)	Ranunculaceae	Fl A SS Z
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BRAZIL**2017 September 22** (Flowers of the Atlantic Forest) (scented) (Block/4)

3361a	2.55r	Begonia, <i>Begonia angularis</i>	Begoniaceae	Fl A MS
3361b	2.55r	Anthurium, <i>Anthurium lucioi</i>	Araceae	Fl A MS
3361c	2.55r	White Ipê, <i>Tabebuia roseoalba</i>	Bignoniaceae	Fl A MS
3361d	2.55r	Pink Ipê, <i>Handroanthus heptaphyllus</i>	Bignoniaceae	Fl A MS
N/A	(1.25r)	Same design as block (inscr. "1° Porte Carta Comercial")		

BURMA (Myanmar)**2019** (Religious Festivals Type of 2019) (Set/4)

448	200k	Jasmine, <i>Jasminum sambac</i> (Religious Examination Festival)	Oleaceae	Fl B
449	200k	Alexandrian Laurel, <i>Calophyllum inophyllum</i> (Buddhist Ordination)	Clusiaceae	Fl B
450	200k	<i>Crinum amoenum</i> (Sayedanmè Festival)	Amaryllidaceae	Fl B
451	200k	Yinmar flower, <i>Chukrasia tabularis</i> (Boat Racing Festival)	Meliaceae	Fl B

CAMBODIA**2008 June 30** (Flowers) (Set/5 & SS/1)

2340	100r	Heart-shape False Pickerelweed, <i>Monochoria vaginalis</i>	Pontederiaceae	Fl A
2341	600r	Sessile Joyweed, Dwarf Copperleaf, <i>Alternanthera sessilis</i>	Amaranthaceae	Fl A
2342	1900r	<i>Nymphoides hydrophylla</i>	Menyanthaceae	Fl A
2343	2000r	<i>Limnophila geoffrayi</i>	Plantaginaceae	Fl A

CAMBODIA (continued)

2344	2200r	<i>Xyris indica</i>	Xyridaceae	Fl A
2345	SS 6000r	<i>Eichhornia crassipes</i>	Pontederiaceae	Fl A SS

2013 September 19 (Growing Rice) (Set/4 & SS/1)

2417	1800r	Rice, <i>Oryza sativa</i> (planting)	Poaceae	V B
2418	2200r	Rice, <i>Oryza sativa</i> (transplanting)	Poaceae	V B
2421	SS 6000r	Rice, <i>Oryza sativa</i> (harvesting)	Poaceae	Fr A SS

2017 August 8 (50th anniv. ASEAN) (Single & SS/1)

2444	3000r	Rumdul, <i>Sphaerocoryne affinis</i>	Annonaceae	Fl A
2445	SS 6000r	Rumdul, <i>Sphaerocoryne affinis</i>	Annonaceae	Fl A SS

CHINA (Taiwan)**2019 August 28** (Tourist Attractions) (Set/4)

4490	\$6	Field of Rapeseed, <i>Brassica napus</i>	Brassicaceae	Fl A
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CUBA**2018 May 26** (Flora of the Western Hemisphere) (Set/8)

6064	10c	Passion Fruit, <i>Passiflora edulis</i> (Paraguay)	Passifloraceae	Fl A
6065	15c	Ipê-amarelo, <i>Handroanthus chrysanthus</i> (= <i>Tabebuia chrysantha</i>) (Brazil)	Bignoniaceae	Fl A
6066	20c	Yucca, <i>Yucca gigantea</i> (= <i>elephantipes</i>) (El Salvador)	Asparagaceae	Fl A
6067	30c	Peruvian Magic Tree, <i>Cantua buxifolia</i> (Peru)	Polemoniaceae	Fl A
6068	40c	Victoria-lily, <i>Victoria amazonica</i> (Guyana)	Nymphaeaceae	Fl A
6069	65c	Sugar Maple, <i>Acer saccharum</i> (Canada)	Sapindaceae	Fl A
6070	75c	Lycaste Orchid, <i>Lycaste skinneri</i> (Guatemala)	Orchidaceae	Fl A
6071	90c	Cattleya Orchid, <i>Cattleya trianae</i> (Colombia)	Orchidaceae	Fl A

2019 May 19 (Quotes from José Martí & Flora) (Set/6 & SS/1)

6159	10c	Kapok, <i>Ceiba pentandra</i>	Malvaceae	Fl Fr T A
6160	15c	Mango, <i>Mangifera indica</i>	Anacardiaceae	Fl Fr T A
6161	30c	<i>Guibourtia hymenaefolia</i>	Fabaceae	Fl Fr T A
6162	35c	Cuban Pine, <i>Pinus cubensis</i>	Pinaceae	Fl Fr T A
6163	75c	<i>Hibiscus elatus</i> (= <i>Talipaiti elatum</i>)	Malvaceae	Fl Fr T A
6164	85c	<i>Calycophyllum candidissimum</i>	Rubiaceae	Fl Fr T A

CZECH REPUBLIC**2019 May 22** (Flower Type of 2002) (see *Plants on Stamps*, Vol. 4, p.23)

3789	(39k)	Dandelion, <i>Taraxacum campyloides</i> (inscr. "E")	Asteraceae	Fl A
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DJIBOUTI**2019 August 27** (Orchids) (MS/4 & SS/1)

1828a	250fr	<i>Prosthechea brassavolae</i>	Orchidaceae	Fl A MS
1828b	250fr	<i>Phalaenopsis mariae</i>	Orchidaceae	Fl A MS
1828c	250fr	<i>Zygopetalum crinitum</i>	Orchidaceae	Fl A MS
1828d	250fr	<i>Gomesa flexuosa</i> (= <i>Oncidium flexuosum</i>)	Orchidaceae	Fl A MS
1836	SS 1000fr	<i>Catasetum fimbriatum</i>	Orchidaceae	Fl A SS
	Margin	R: <i>Dendrobium parishii</i>	Orchidaceae	Fl A SS Z

DOMINICAN REPUBLIC**2019 February 26** (National Botanical Garden Bromeliads) (MS/12)

1642a	15p	Wild Pineapple, <i>Bromelia pinguin</i>	Bromeliaceae	Fl A MS
1642b	15p	Florida Strap Airplant, <i>Catopsis floribunda</i>	Bromeliaceae	Fl A MS
1642c	15p	West Indian Tufted Airplant, <i>Guzmania monostachia</i>	Bromeliaceae	Fl A MS
1642d	15p	<i>Tillandsia baliophylla</i>	Bromeliaceae	Fl A MS
1642e	15p	<i>Tillandsia compressa</i>	Bromeliaceae	Fl A MS
1642f	15p	Giant Airplant, Cardinal Airplant, <i>Tillandsia fasciculata</i>	Bromeliaceae	Fl A MS
1642g	15p	<i>Tillandsia hotteana</i>	Bromeliaceae	Fl A MS
1642h	15p	Potbelly Airplant, <i>Tillandsia paucifolia</i>	Bromeliaceae	Fl A MS
1642i	15p	Fuzzywuzzy Airplant, <i>Tillandsia pruinosa</i>	Bromeliaceae	Fl A MS

DOMINICAN REPUBLIC (continued)

1642j	15p	<i>Mezobromelia</i> (= <i>Vriesea</i>) <i>capituligera</i>	Bromeliaceae	Fl A MS
1642k	15p	<i>Vriesea incurva</i>	Bromeliaceae	Fl A MS
1642l	15p	Barkplant, <i>Vriesea sintenisii</i>	Bromeliaceae	Fl A MS

2019 September 18 (Alexander von Humboldt, naturalist) (Single)

1654	250p	<i>Andira inermis</i>	Fabaceae	Fl A
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ECUADOR**2018 December 27** (Cotacachi-Cayapas Ecological Res.) (Strip/5 & Bklt/8)

2225d	\$3	<i>Epidendrum jamiesonis</i>	Orchidaceae	Fl A
2225		Horiz strip/5 (Sc#2225a–e) (perf 13¾×13½)		
2226g	\$1	<i>Bomarea glaucescens</i>	Alstroemeriaceae	Fl A
2226h	\$1	<i>Vaccinium floribundum</i>	Ericaceae	Fl A
2226		Bklt/8 (Sc#2226a–h) (die cut) (s/a)		

FINLAND**2019 March 13** (Floral Artistry) (Strip/3 & Bklt/15)

1583a	(€1.50)	Floral headdress (w/ dog)		Fl A U
1583b	(€1.50)	Flowers (w/ jewelry)		Fl A U
1583c	(€1.50)	Floral wreath		Fl A U
1583d		Bklt/15 (5ea Sc#1583a–c)		
1583		Vert Strip/3 (Sc#1583a–c)		

2019 May 8 (Say it with Flowers) (Bklt/6)

1587a	(€1.50)	Rose, <i>Rosa</i> × <i>hybrida</i> (on letter)	Rosaceae	Fl B
1587b	(€1.50)	U/I Flowers (in wagon)		Fl B U
1587c	(€1.50)	Sunflower, <i>Helianthus annuus</i> (on typewriter)	Asteraceae	Fl B
1587d	(€1.50)	Tulips, <i>Tulipa</i> × <i>hybrida</i> (in watering can)	Liliaceae	Fl B
1587e	(€1.50)	Roses, <i>Rosa</i> × <i>hybrida</i> (in teacup)	Rosaceae	Fl B
1587f	(€1.50)	Rose, <i>Rosa</i> × <i>hybrida</i> (on books)	Rosaceae	Fl B

2019 June 5 (Finland's Nature Signs 2) (Strip/5)

1593	(€1.50)	Birch trees, <i>Betula pendula</i>	Betulaceae	T A
1594a		Coil Strip/5 (Sc#1590–94)		

FRANCE**2019 May 3** (Flower Photos by Jacques de Sordet) (Set/12 & Bklt/12)

5643–54		U/I Flowers		Fl A U
5654a		Bklt/12 (Sc#5643–54)		

2019 May 17 (Endangered Flora) (Single, MS/4 & 2ea SS/2)

5657	88c	Violette de Rouen, <i>Viola hispida</i>	Violaceae	Fl A
5658		MS/4 (Sc#5657 & Sc#5658a–c)		
5658a	88c	Saxifrage oeil-de-bouc, <i>Saxifraga hirculus</i>	Saxifragaceae	Fl A
5658b	88c	Faujasie écaillée, <i>Faujasia squamosa</i>	Asteraceae	Fl A
5658c	88c	Dracocéphale d'Autriche, <i>Dracocephalum austriacum</i>	Lamiaceae	Fl A
5658d		SS/2 (Sc#5657 & Sc#5658b)		
5658e		SS/2 (Sc#5658a & Sc#5658c)		

FRENCH POLYNESIA**2019 June 7** (Cantaloupe) (scented) (Single)

1231	140fr	Cantaloupe, <i>Cucumis melo</i>	Cucurbitaceae	Fr A
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GREAT BRITAIN**2019 August 13** (Forests) (Set/6 & 3ea Pairs)

3870	(70p)	U/I trees (Glen Affric National Nature Reserve, Inverness-shire)		T A U
3871	(70p)	U/I trees (Westonbirt National Arboretum, Gloucestershire)		T A U
3871a		Vert pair (Sc#3870–71)		
3872	£1.55	U/I trees (Sherwood Forest, Nottinghamshire)		T A U
3873	£1.55	U/I trees (Coed y Brenin [King's Forest], Gwynedd)		T A U
3873a		Vert pair (Sc#3872–73)		

GREAT BRITAIN (continued)

3874	£1.60	U/I trees (Glenariff Forest Park, County Antrim)		T A U
3875	£1.60	U/I trees (Kielder Forest, Northumberland)		T A U
3875a		Vert pair (Sc#3874–75)		

GREAT BRITAIN (Alderney) 2019 November 11 (Remembrance Day centenary) (Single)

644	£2	Stylized Poppy, <i>Papaver rhoeas</i>	Papaveraceae	Fl A S
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GREAT BRITAIN (England) 2019 March 19 (Oak Tree & Tudor Rose Type of 2018)

39	£1.35	Oak, <i>Quercus robur</i>	Fagaceae	T A
40	£1.55	Tudor Rose, <i>Rosa</i> sp.	Rosaceae	Fl A U

GREAT BRITAIN (Scotland) 2019 March 19 (Thistle Type of 2018)

53	£1.35	Thistle, <i>Onopordum acanthium</i>	Asteraceae	Fl A
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GREAT BRITAIN (Wales & Monmouthshire) 2019 March 19 (Daffodil Type of 2018)

53	£1.35	Daffodil, <i>Narcissus pseudonarcissus</i>	Amaryllidaceae	Fl A
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ICELAND 2019 September 12 (Icelandic Nature Day) (SS/2)

1502a	(550k)	Various U/I plants (w/ white panel at Top)		V B SS U
1502b	(550k)	Various U/I plants (w/ white panel at Bot)		V B SS U
1502		Ptg: <i>Vegetation in Tröllaskagi Peninsula</i> , by Eggert Pétursson		

KIRIBATI 2019 September 27 (150th anniv. Mahatma Gandhi) (Set/4 & SS/2)

1058	40c	Water Lily flower, <i>Nymphaea</i> sp. (w/ quote)	Nymphaeaceae	Fl B
1059	50c	Lotus flower, <i>Nelumbo nucifera</i> (w/ quote)	Nelumbonaceae	Fl B
1060	75c	Water Lily flower, <i>Nymphaea</i> sp. (w/ quote)	Nymphaeaceae	Fl B
1061	\$2.50	Lotus flower, <i>Nelumbo nucifera</i> (w/ quote)	Nelumbonaceae	Fl B
1062a	SS \$1.50	Lotus flower, <i>Nelumbo nucifera</i> (w/ quote)	Nelumbonaceae	Fl B SS
1062b	SS \$5	Water Lily flower, <i>Nymphaea</i> sp. (w/ quote)	Nymphaeaceae	Fl B SS
1062		SS/2 (Sc#1062a–b)		

LAOS 2017 August 8 (ASEAN Meeting) (Single)

1943	9000k	Plumeria, <i>Plumeria alba</i>	Apocynaceae	Fl A
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LATVIA 2019 June 13 (Ligo Day: Floral Crown) (Single)

1022	50c	Red Clover, <i>Trifolium pratense</i>	Fabaceae	Fl B
		Poppy Anemone, <i>Anemone coronaria</i>	Ranunculaceae	Fl B
		Oxeye Daisy, <i>Leucanthemum vulgare</i>	Asteraceae	Fl B
		Cornflower, <i>Centaurea cyanus</i>	Asteraceae	Fl B

MAURITIUS 2019 August 23 (Pierre Poivre, Botanist) (Single)

1197	33r	Black Ebony, <i>Diospyros tessellaria</i>	Ebenaceae	T A
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MOLDOVA 2019 August 15 (Food Crops) (Set/3)

1046	1.751	Sunflower, <i>Helianthus annuus</i>	Asteraceae	Fl Fr A
1047	21	Wheat, <i>Triticum vulgare</i>	Poaceae	Fl Fr A
1048	5.751	Maize, <i>Zea mays</i>	Poaceae	Fl Fr A

MONTSERRAT 2018 December 5 (Local Trees) (MS/4 & SS/1)

1420a	\$5	Tamarind, <i>Tamarindus indica</i>	Fabaceae	Fr A
1420b	\$5	Cashew, <i>Anacardium occidentale</i>	Anacardiaceae	Fr A
1420c	\$6	Starfruit, <i>Averrhoa carambola</i>	Oxalidaceae	Fr A
1420d	\$6	Barbados Cherry, <i>Malpighia glabra</i>	Malpighiaceae	Fr A
1421	SS \$10	Guinep, <i>Melicoccus bijugatus</i>	Sapindaceae	Fr A SS

NEVIS		2019 March 16 (Royal Poinciana Flowers) (MS/4 & SS/1)		
1985a	\$4	Royal Poinciana, <i>Delonix regia</i> (tree)	Fabaceae	Fl T MS
1985b	\$5	Royal Poinciana, <i>Delonix regia</i> (blossom)	Fabaceae	Fl A MS
1985c	\$6	Royal Poinciana, <i>Delonix regia</i> (flower cluster)	Fabaceae	Fl A MS
1985d	\$7	Royal Poinciana, <i>Delonix regia</i> (flower cluster)	Fabaceae	Fl A MS
1985	Margin	Top & LR: Same species	Fabaceae	Fl MS Z
1986	SS \$14	Royal Poinciana, <i>Delonix regia</i> (tree)	Fabaceae	Fl T SS
1986	Margin	Top & LR: Same species	Fabaceae	Fl SS Z
		2019 July 31 (Orchids: Singapex 2019) (MS/4 & SS/1)		
1998a	\$4	<i>Guarianthe skinneri</i>	Orchidaceae	Fl A MS
1998b	\$5	<i>Papilionanthe</i> 'Miss Joaquim'	Orchidaceae	Fl A MS
1998c	\$6	<i>Prosthechea cochleata</i>	Orchidaceae	Fl A MS
1998d	\$7	<i>Cattleya labiata</i>	Orchidaceae	Fl A MS
1998	Margin	Top: U/I Orchid (like Sc#1999)	Orchidaceae	Fl U MS Z
1999	SS \$14	U/I Orchid	Orchidaceae	Fl U SS
NEW ZEALAND		2019 (Alpine Flower Type or 2019) (Set/3 & SS/3)		
2839a	\$1.20	Mountain Buttercups, <i>Ranunculus insignis</i>	Ranunculaceae	Fl A
2841a	\$1.20	Black Scree Button Daisies, <i>Leptinella atrata</i>	Asteraceae	Fl A
2842a	\$2.40	Wollyheads, <i>Craspedia incana</i>	Asteraceae	Fl A
2842b		SS/3 (Sc#2839a, Sc#2841a, Sc#2842a (ovpt for China 2019 World Stamp Exhibition))		
ROMANIA		2019 June 11 (Melliferous Flowers) (Set/5 & SS/5)		
6279	1.90l	Silver Linden, Silver Lime, <i>Tilia tomentosa</i>	Malvaceae	Fl A
6279a		MS/5+1 label (Sc#6279)		
6280	2.80l	Black Locust, <i>Robinia pseudoacacia</i>	Fabaceae	Fl A
6280a		MS/5+1 label (Sc#6280)		
6281	5l	Sunflower, <i>Helianthus annuus</i>	Asteraceae	Fl A
6281a		MS/5+1 label (Sc#6281)		
6282	8.50l	Field Mustard, <i>Brassica rapa</i> (= <i>B. rapa</i> ssp. <i>oleifera</i>)	Brassicaceae	Fl A
6282a		MS/5+1 label (Sc#6282)		
6283	12l	Apple, <i>Malus domestica</i>	Rosaceae	Fl A
6283a		MS/5+1 label (Sc#6283)		
Note		SS/5 (Sc#6279–83) (issued in limited quantities)		
S. GEORGIA & S. SANDWICH IS.		2019 August 15 (Food of South Georgia) (Set/3 horiz pairs)		
603b	55p	Greater Burnet, <i>Acaena magellanica</i>	Rosaceae	Fl A
THAILAND		2019 June 1 (ASEAN Summit & National Flowers) (Single)		
3061	3b	U/I Flowers (bouquet)		Fl A U
		2019 June 21 (40th anniv. Diplomatic Relations w/ Maldives) (MS/8)		
3063c	3b	Durians, <i>Durio zibethinus</i>	Malvaceae	Fr A MS
3063d	3b	Coconuts, <i>Cocos nucifera</i>	Areaceae	Fr A MS
3063f	3b	Golden Shower Flowers, <i>Cassia fistula</i>	Fabaceae	Fl A MS
3063h	3b	Roses, <i>Rosa</i> × <i>hybrida</i>	Rosaceae	Fl A MS
UNITED STATES		2019 December 2 (Healing PTSD) (Single)		
B7	(55c+10c)	U/I plant sprout (inscr. “+ First Class”)		V A U

NEW PLANTS IN THE PHILATELIC HERBARIUM

Christopher E. Dahle, BU1269

Corydalis flavula PAPAVERACEAE

Common names: Yellow Fumewort, Yellow Harlequin, Fumeroot, Yellow Fumitory

Synonyms: *Capnodes flavulum*, *C. flavula*, *Corydalis aurea* var. *flavula*, *Corydalis flavidula*, *Neckeria flavula*

Annual herb to 30 cm with reddish stems. Alternate leaves pinnately divided. Flowers yellow with uppermost petal spurred to 1 cm long, 5 mm broad, on racemes to 8 cm. Blossoms April to May. Found on moist slopes in wooded ravines. Native to eastern North America.



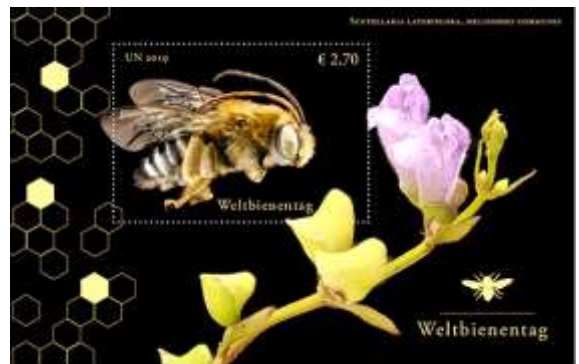
United Nations, New York Sc#1216. Issued 20 May 2019, for World Bee Day. Photographs of bees provided by Patuxent Wildlife Research Center of the United States Geological Survey. Designed by Rorie Katz of UNPA. Printed by offset lithography and gold foil by Lowe-Martin Group (Canada) in quantities of 18,000 miniature sheets of single stamps.

Scutellaria lateriflora LAMIACEAE

Common names: Blue Skullcap, Mad Dog Skullcap, Side-flowering Skullcap

Synonyms: *S. lateriflora* f. *albiflora*, *S. lateriflora* var. *albiflora*, *S. lateriflora* var. *axillaris*, *S. lateriflora* f. *lateriflora*, *S. lateriflora* f. *rhodantha*

Herbaceous perennial 60–80 cm. Stems light green to red-green, four-sided with tendency to sprawl. Leaves, opposite, 8×5 cm lanceolate, serrated with conspicuous veins on upper side. Racemes to 15 cm bear 6–7 pairs of flowers 8 mm with tubular pale blue, lavender, or white corolla and tubular light green calyx. Behind upper lobe of calyx is a dish-like projection, typical of *Scutellaria*. Blooms June to October. Found in moist habitats in light shade to full sun throughout North America.



United Nations Vienna Sc#638. Issued 20 May 2019, for World Bee Day. Printed in quantities of 21,000.

Rytidosperma clelandii POACEAE

Synonyms: *Danthonia clelandii*, *Joycea clelandii*, *Notodanthonia clelandii*

Herbaceous perennial 40–75 cm. Leaf blades filiform 15–30 cm long, 0.75–2 mm wide. Panicle inflorescence 8–13 cm. Found in wetter parts of South Australia in the Mt. Lofty area and Adelaide Hills at 200–700 m in light shade in Eucalyptus understory.

Australia Sc#5021 & Sc#5024. Issued in a set of three “Seeds of Endangered Species” on 8 October 2019. Designed by Sonia Young of Australia Post Design Studio using a photograph from the South Australian Seed Conservation Centre of the Botanic Gardens and State Herbarium of South Australia. Printed on gummed Tullis Russell and self-adhesive Securepost MC80 papers using offset lithography by RA Printing.



***Epacris petrophila* ERICACEAE**

Common name: Snow Heath

Erect shrub 30–60 cm, branchlets finely pubescent. Leaves ovate or elliptic 1.1–3.3 mm long, 0.7–1.7 mm wide. White flowers in short terminal leafy clusters 6–7 mm diameter appear in December to February. Found in alpine and subalpine heath and bogs of Australian Alps in New South Wales and Victoria and in Tasmania.

Australia Sc#5022 & Sc#5025. Issued 8 October 2019, in “Seeds of Endangered Species.” Photograph from the National Seed Bank at the Australian National Botanic Gardens.

***Petrophile latericola* PROTEACEAE**

Multi-stemmed shrub to 1.5 m. Leaves alternate, 15–50 mm long, 1–1.2 mm wide. Inflorescence yellow, appears in November. Perianth 20–22 mm long, and hairy. Cones with persistent scales. Found in three locations on winter-wet flats of red sandy clay over ironstone in the Swan Coastal Plain of Western Australia.

Australia Sc#5013 & Sc#5026. Issued 8 October 2019, in “Seeds of Endangered Species.” Photograph from Western Australian Seed Centre, Department of Biodiversity, Conservation and Attractions.

***Chukrasia tabularis* MELIACEAE**

Common name: Indian Mahogany, Chittagong Wood, Chickrassy
Synonyms: 14

Medium to large deciduous or evergreen tree to 30 m. Pinnate or bipinnate leaves with leaflets 4–15 cm long 3–6 cm wide, narrowly oval and tapered at tip. Flowers pale red on panicles 10–30 cm in April to July. Fruit yellowish gray, wrinkling on maturity, is an ovoid woody capsule. Has many uses in Ayurveda medicine. Timber used for furniture, musical instruments, and paneling. Native to south and southeast Asia at 0–1,500 m.

Burma (Myanmar) Sc#451. Issued 30 August 2019, in the series on monthly festivals for the Regatta festival. Designed by Wai Zin Paing. Printed by offset at Security Printing Works (Myanmar) in four colors in quantity of 150,000.

***Monochoria vaginalis* PONTEDERIACEAE**

Common names: Heartshape False Pickerelweed, Oval-leafed Pondweed
Synonyms: 23

Perennial wetland herb, erect, ascending, or occasionally creeping to 50 cm. Leaves sessile, linear to 5 cm, or petiolate, cordate 7–28 cm. Flowers in racemes 2–4 cm with 3–25 flowers with purple-blue tepals, 1 cm long. Weedy in rice fields. Leaves used as vegetable. Roots used medicinally. Native to temperate and tropical Asia.

Cambodia Sc#2340. Issued 30 June 2008, in a set of five and a souvenir sheet featuring Wetland Flora. 100,000 printed.



***Alternanthera sessilis* AMARANTHACEAE**

Common names: Sessile Joyweed, Dwarf Copperleaf

Synonyms: 65

Perennial herb to 1 m, erect, ascending, or creeping. Leaves opposite, linear-lanceolate 1–15 cm long by 0.2–3 cm wide. Sessile flowers solitary or in clusters up to five, white to pinkish tepals to 2.5 mm. Flowers and fruits throughout the year. Eaten as a vegetable and used medicinally. Grows in constant or periodically humid localities in loamy alkaline soil. Native to tropical America. Noxious weed in rice and other crops.

Cambodia Sc#2341. Issued 30 June 2008, in “Flora of Wetlands” series.

***Limnophila geoffrayi* PLANTAGINACEAE**

Perennial herb, aquatic or nearly aquatic. Submerged stems have feathery leaves. Emergent stems have lanceolate leaves to 3 cm, serrated. Flowers, single white, pink, purple, or blue sometimes spotted, sessile, solitary, or terminal spikes. Grows in the margins of ponds, marshes, and rice fields, as well as in floating mats of vegetation on large open water bodies. Essential oils have anti-mycobacterial and antioxidant activities. Used locally as a food plant. Native to Cambodia, Laos, Thailand, and Viet Nam.

Cambodia Sc#2343. Issued 30 June 2008, in “Flora of Wetlands” series.

***Xyris indica* XYRIDACEAE**

Perennial herb 14–90 cm, found in swamps, streams, and ponds. Leaves basal, linear, 20–45 cm × 0.4–0.8 cm. Flowers yellow, petals three, obovate, appear August–November. Used medicinally. Distributed from south and southeast Asia to Australia.

Cambodia Sc#2344. Issued 30 June 2008, in “Flora of Wetlands” series.

***Guibourtia hymenaefolia* FABACEAE**

Common names: Tiete Rosewood, Patagonian Cherry

Synonyms: *Copaiba hymenaefolia*, *Copaiba hymenifolia*, *Copaifera hymenaefolia*, *Pseudocopaiba hymenaefolia*

Semi-deciduous tree 14–50 m. Used for timber and as an ornamental. Grows on calcareous soils in dry forests. Found in South America and the Caribbean.

Cuba Sc#6161. Issued 19 May 2019, for the 25th anniversary of the Ariguanabo Martí Forest.

***Calycophyllum candidissimum* RUBIACEAE**Synonyms: *Macrocnemum candidissimum*, *Mussaenda candida*, *Mussaenda candidissima*

Deciduous tree 12–15 m. Leaves elliptic or ovate, 5–13 cm long, 2.5–7 cm wide. Flowers have conspicuous expanded white calyx lobe, appearing on terminal compound stalks, in clusters of three, November to March. Grows on rich deep soil in full sun. Used as firewood and timber. Found from Mexico to Colombia and Venezuela, mainly on Pacific slopes, and in Cuba.

Cuba Sc#6164. Issued 19 May 2019, for the 25th anniversary of the Ariguanabo Martí Forest.



Catopsis floribunda BROMELIACEAE

Common names: Florida Strap Airplant, Many-flowered Catopsis

Synonyms: *Pogospermum floribundum*

Tank epiphyte to 70 cm, leaves 20–40 cm. Flower stalk 25 cm with 5–15 lateral branches bearing 15–50 flowers. Yellow or white flowers in fall and winter. Distributed in humid shady habitats from Florida to Mexico, West Indies, and South America.

Dominican Republic Sc#1642b. Issued 26 February 2019, commemorating the National Botanical Garden. Photographed by Francisco Jiménez. Designed by Alejandro Vignieri. Printed by Papeles Criebe, S.A. Santo Domingo.

***Tillandsia baliophylla*** BROMELIACEAE

Tank epiphyte, leaves 60–90 cm long, 7 cm wide. Petals greenish white. Flower stalk to 2 m, bipinnately branched. Grows in moist cloud forests, along streams and rivers. Endemic to island of Hispaniola at 750–1,200 m.

Dominican Republic Sc#1642d. Issued 26 February 2019, commemorating the National Botanical Garden.

***Tillandsia paucifolia*** BROMELIACEAE

Common name: Potbelly Airplant

Synonyms: *T. bracteosa*, *T. yucutana*, *Vriesea bracteosa*

Epiphytes growing singly or in clusters. Five to 10 leaves, recurved form a pseudobulb. Covered in silvery trichomes that aid in water absorption. Tubular flowers, 4 cm long, pale pink to lavender-blue, found in spring to summer. Native to Central America, central and southern Mexico, Venezuela, Colombia, West Indies, and Florida. Found at an altitude 0–1,000 m.

Dominican Republic Sc#1642h. Issued 26 February 2019, commemorating the National Botanical Garden.

Mezobromelia capituligera BROMELIACEAESynonyms: *Vriesea capituligera* and 13 others

Herbaceous perennial epiphyte 50–150 cm. Basal leaves, 70 cm, sessile. Inflorescence columnar, densely bipinnate, 30 axillary spikes, red. Bracts bright red. Flowers 3 cm white, tubular. Native to West Indies and northern South America.

Dominican Republic Sc#1642j. Issued 26 February 2019, commemorating the National Botanical Garden.

***Vriesea incurva*** BROMELIACEAESynonyms: *Tillandsia dactylifera*, *T. digitata*, *T. incurva*

Acaulescent epiphyte forming rosette of leaves 11–32 cm, thin, leathery. Inflorescence pendent with 2–4 racemes 23–40 cm, 9–20 flowered. Floral bracts 2.4–3.3 cm long, deep pink or reddish. Flowers yellowish or green, petals linear-ligulate 2.7–3.6 cm. Distribution: Cloud forests in Greater Antilles, and Costa Rica to Guyana and Bolivia.

Dominican Republic Sc#1642k. Issued 26 February 2019, commemorating the National Botanical Garden.

Vriesea sintenisii BROMELIACEAE

Common name: Barkplant

Synonyms: *Caraguata sintenisii*, *Guzmania sintenisii*, *Thecophyllum sintenisii*, *Werauhia sintenisii*

Evergreen epiphyte with rosette form, 30–60 cm. Leaves lanceolate, entire, sessile, 25–45 cm long, 25–35 mm wide. Inflorescence erect 15 cm, bracts 5–10 cm, red. Floral bracts 8–18 mm by 15 mm. Flowers yellow, petals 3 cm. Native to Puerto Rico, Cuba, Jamaica, and Hispaniola at altitudes 725–3,000 m.



Dominican Republic Sc#1642l. Issued 26 February 2019, commemorating the National Botanic Garden.

Callicarpa americana LAMIACEAE

Common name: American Beautyberry

Synonym: *C. americana* var. *alba*, *C. americana* f. *lactea*, *C. americana* var. *lactea*

Shrub 1–3.5 m tall spreading 1–2 m, prostrate to erect. Leaves in pairs or threes to 20 cm long, ovate to elliptic. Twigs rounded to four-sided. Small flowers in mid to late summer produce clusters of purple ornamental berries that persist after leaves fall. Shade intolerant, widely distributed on clay or loamy soil on coastal plains from Virginia to Florida and west to Arkansas, Oklahoma, and Texas.



United States Sc#5417. Issued 17 September 2019. One in a series of four Winter Berries. Designed by Antonio Alcalá from artwork by Steve Buchanan of Winsted, Connecticut. Printed by Ashton Potter (USA) Ltd. in booklets of 20, in a quantity of 300 million on Nonphosphored Type III, Block Tag paper with pressure sensitive adhesive.

HAS THE USPS GONE VEGAN?

If you look at this year's stamp program planned by the U.S. Postal Service, you might get the idea that the folks there have gone vegan. Botanical subjects are everywhere and there are no animals in sight.

On 21 February, the USPS issued twenty Forever stamps (55c) celebrating **wild orchids**. The ten different designs were issued in a double-sided booklet of 20 and with a slightly smaller size in coils of 3,000 and 10,000.

On 2 April, they will release a set of two wedding stamps (see page 16) that depict **flowers** on a boutonniere (55c) and a corsage (70c).

On 13 May, the USPS plans to release another double-sided pane of 20 Forever stamps (55c) in ten different designs featuring photographs of botanic, country estate, and municipal **American gardens** that will depict a variety of botanical elements.

Sometime this coming summer, they will issue a third double-sided booklet of 20 Forever (55c) stamps with ten designs showing various **fruits and vegetables**.

Unless you count the human beings on a few other 2020 issues and the stylized rat for the Lunar New Year issue, zoological elements seem to have been omitted.



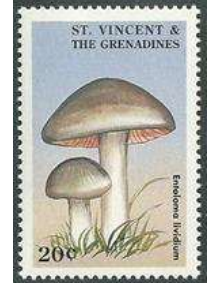


FUNGI

Editor

Dr. Paul A. Mistretta, BU1681

New Listings



Scott# Denom Common Name/Scientific Name Family Code
 [Ed. note: Occasionally in this section and also in the Herpetology and Entomology sections, 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.]

BENIN

2005-08 (Surcharges)

1342 175fr [no common name], *Hohenbuehelia georgenia* (Sc#1058 surch) Pleurotaceae A

BRAZIL

2019 June 5 (Mushrooms) (Block/6)

3416a 1.60r [an earthstar], *Geastrum violaceum* Geastraceae A
 3416b 1.60r Sulfur Shelf, *Laetiporus gilbertsonii* Fomitopsidaceae A
 3416c 1.60r [no common name], *Oudemansiella cubensis* Physalacriaceae A
 3416d 1.60r [stinkhorn], *Clathrus chrysomycelinus* Phallaceae A
 3416e 1.60r [no common name], *Hydnopolyporus fimbriatus* Irpicaceae A
 3416f 1.60r Column Stinkhorn, *Clathrus columnatus* Phallaceae A

DJIBOUTI

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

1799 250fr Man on Horseback or Yellow Knight, *Tricholoma equestre* Tricholomataceae A
 1799 250fr Bluing Bolete or Cornflower Bolete, *Gyroporus cyanescens* Gyroporaceae A
 1799 250fr King Bolete, *Boletus betulicola* Boletaceae A
 1799 250fr Dark Cep or Bronze Bolete, *Boletus aureus* Boletaceae A
 1811 SS 1000fr Sweet Tooth or Wood Hedgehog, *Hydnum repandum* Hydnumaceae A
 Margin UR: Birch Bolete or Scaber Stalk, *Leccinum scabrum* Boletaceae Z
 LR: Velvet Bolete, *Suillus variegatus* Suillaceae Z

DOMINICAN REPUBLIC

2019 August 21 (Mushrooms) (MS/12)

1652a 20p False Parasol, *Chlorophyllum molybdites* (☞) Agaricaceae A
 1652b 20p [no common name], *Amanita cruzii* Amanitaceae A
 1652c 20p [a stinkhorn], *Clathrus roseovolvatus* Phallaceae A
 1652d 20p Scarlet Cup Fungus, *Cookeina sulcipes* Sarcoscyphaceae A
 1652e 20p [no common name], *Entoloma aff. altissimum* Entolomataceae A
 1652f 20p Fagile Dapperling, *Leucocoprinus fragilissimus* Agaricaceae A
 1652g 20p [no common name], *Leucopaxillus gracillimus* Tricholomataceae A
 1652h 20p [no common name], *Marasmius tageticolor* Marasmiaceae A
 1652i 20p Bamboo Mushroom or Veiled Lady, *Phallus indusiatus* Phallaceae A
 1652j 20p [an earthstar], *Geastrum violaceum* Geastraceae A
 1652k 20p [no common name], *Phillipsia domingensis* Sarcoscyphaceae A
 1652l 20p [a stinkhorn], *Laternea pusilla* Phallaceae A

ESTONIA

2019 August 29 (Mushroom) (Single)

903 65c [no common name], *Galerina marginata* (☞) Hymenogastraceae A

GREAT BRITAIN

2019 October 10 (Gruffalo) (MS/4)

3905 Margin LL: Two stylized mushrooms (*Amanita muscaria*?) S U Z
 LR: Two stylized mushrooms S U Z



MAMMALIA

Editor

Michael Prince, LM68



New Listings

Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
AUSTRALIA 2019 September 23 (Animals Type of 2006) (Bklt/5)				
5010	\$2.50	Greater Bilby, <i>Macrotis lagotis</i>	Peramelidae	A
5010a		Bklt/5 (Sc#5010)		
BOTSWANA 2019 August 15 (Animals of Nxai Pans) (Set/5 & SS/5)				
1073	50t	Cheetah, <i>Acinonyx jubatus</i>	Felidae	A
1074	2p	Springbok, <i>Antidorcas marsupialis</i>	Bovidae	A
1075	3p	Gemsbok, <i>Oryx gazella</i>	Bovidae	A
1076	5p	Bat-eared Fox, <i>Otocyon megalotis</i>	Canidae	A
1077	7p	Lanner Falcon, <i>Falco biarmicus</i>	Falconidae	A
1077a		SS/5 (Sc#1073–77)		
	Margin	ML: Zebra, <i>Equus quagga</i>	Equidae	Z
BULGARIA 2019 October 19 (Extinct Animals & Their Skeletons) (Set/4 & SS/4)				
4862	65s	†Aurochs, <i>Bos primigenius</i> (tinted bkgrd)	Bovidae	A
4863	1.20l	†Steller's Sea Cow, <i>Hydrodamalis gigas</i> (tinted bkgrd)	Dugongidae	A
4864	1.50l	†Thylacine, <i>Thylacinus cynocephalus</i> (tinted bkgrd)	Thylacinidae	A
4866a	SS 65s	†Aurochs, <i>Bos primigenius</i> (white bkgrd)	Bovidae	A
4866b	SS 1.20l	†Steller's Sea Cow, <i>Hydrodamalis gigas</i> (white bkgrd)	Dugongidae	A
4866c	SS 1.50l	†Thylacine, <i>Thylacinus cynocephalus</i> (white bkgrd)	Thylacinidae	A
CAMBODIA 2019 February 22 (Fishing Cat) (Set/7 & SS/1)				
2496	500r	Fishing Cat, <i>Prionailurus viverrinus</i>	Felidae	A
2497	900r	Same species	Felidae	A
2498	1000r	Same species	Felidae	A
2499	2000r	Same species	Felidae	A
2500	2500r	Same species	Felidae	A
2501	3000r	Same species	Felidae	A
2502	4000r	Same species	Felidae	A
2503	SS 6000r	Fishing Cat, <i>Prionailurus viverrinus</i>	Felidae	A
CANADA 2019 July 24 (Bears) (SS/4 & Bklt/8)				
3190a	(90c)	Grizzly Bear, <i>Ursus arctos ssp. horribilis</i>	Ursidae	A
3190b	(90c)	Polar Bear, <i>Ursus maritimus</i>	Ursidae	A
3190c	(90c)	American Black Bear, <i>Ursus americanus</i>	Ursidae	A
3190d	(90c)	Kermode Bear, <i>Ursus americanus ssp. kermodei</i>	Ursidae	A
3190	Margin	American Black Bear, <i>Ursus americanus</i>	Ursidae	Z
3191	(90c)	American Black Bear, <i>Ursus americanus</i>	Ursidae	A
3192	(90c)	Polar Bear, <i>Ursus maritimus</i>	Ursidae	A
3193	(90c)	Kermode Bear, <i>Ursus americanus ssp. kermodei</i>	Ursidae	A
3194	(90c)	Grizzly Bear, <i>Ursus arctos ssp. horribilis</i>	Ursidae	A
3194a		Bklt/8 (2ea Sc#3191–94)		
CUBA 2018 August 30 (Horses) (SS/1)				
6088	SS 1p	Przewalski's Horse, <i>Equus caballus ssp. przewalskii</i>	Equidae	A

CZECH REPUBLIC**2019 September 4** (Animals in Czech Republic Zoos) (MS/4+4 labels)

3802b	23k	Hungarian Racka Sheep, <i>Ovis aries</i> ssp. <i>strepsiceros</i>	Bovidae	A
3802c	27k	European Otter, <i>Lutra lutra</i>	Mustelidae	A
3802d	33k	Takin, <i>Budorcas taxicolor</i>	Bovidae	A
	Label	Wild Ass, <i>Equus asinus</i> ssp. <i>somaliensis</i>	Equidae	Z
	Margin	UL: Leopard, <i>Panther pardus</i>	Felidae	Z

DJIBOUTI**2018 December 13** (Dolphins) (MS/4 & SS/1)

1590a	240fr	Dusky Dolphin, <i>Lagenorhynchus obscurus</i>	Delphinidae	A
1590b	240fr	Short-beaked Common Dolphin, <i>Delphinus delphis</i>	Delphinidae	A
1590c	240fr	Atlantic Spotted Dolphin, <i>Stenella frontalis</i>	Delphinidae	A
1590d	240fr	Common Bottlenose Dolphin, <i>Tursiops truncatus</i>	Delphinidae	A
1609	SS 950fr	Ganges River Dolphin, <i>Platanista gangetica</i>	Platanistidae	A
	Margin	LR: Common Bottlenose Dolphin, <i>Tursiops truncatus</i>	Delphinidae	Z

2018 December 13 (Endangered Species) (MS/4 & SS/1)

1594a	240fr	Asiatic Elephant, <i>Elephas maximus</i>	Elephantidae	A
1594b	240fr	Tiger, <i>Panthera tigris</i>	Felidae	A
1594d	240fr	Grevy's Zebra, <i>Equus grevyi</i>	Equidae	A
1613	SS 950fr	Red Panda, <i>Ailurus fulgens</i>	Ailuridae	A
	Margin	LR: Grevy's Zebra, <i>Equus grevyi</i>	Equidae	Z

2018 December 13 (Climate Change) (MS/4 & SS/1)

1595b	240fr	Polar Bear, <i>Ursus maritimus</i>	Ursidae	A
1595d	240fr	Koala, <i>Phascolarctos cinereus</i>	Phascolarctidae	A
1614	SS 950fr	Polar Bear, <i>Ursus maritimus</i>	Ursidae	A

2018 December 13 (Stamps-on-Stamps) (MS/4 & SS/1)

1596a	240fr	Tiger, <i>Panthera tigris</i> (Russia Sc#6181 s-o-s)	Felidae	A
1596c	240fr	European Otter, <i>Lutra lutra</i> (DDR Sc#2620 s-o-s)	Mustelidae	A
1596d	240fr	Corsac Fox, <i>Vulpes corsac</i> (Kyrgyzstan Sc#123a s-o-s)	Canidae	A
1615	SS 950fr	Eurasian Beaver, <i>Castor fiber</i> (Belarus Sc#119 s-o-s)	Castoridae	A
	Margin	LL: European Otter, <i>Lutra lutra</i> (DDR Sc#2620 s-o-s)	Mustelidae	Z
		MR: Corsac Fox, <i>Vulpes corsac</i> (Kyrgyzstan Sc#123a s-o-s)	Canidae	Z
		LR: Corsac Fox, <i>Vulpes corsac</i>	Canidae	Z

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

1617a	240fr	Giant Panda, <i>Ailuropoda melanoleuca</i> (seated facing R)	Ursidae	A
1617b	240fr	Same species (seated facing front)	Ursidae	A
1617c	240fr	Same species (seated in tree)	Ursidae	A
1617d	240fr	Same species (walking)	Ursidae	A
	Margin	Bot: Same species	Ursidae	Z
1627	SS 950fr	Giant Panda, <i>Ailuropoda melanoleuca</i>	Ursidae	A
	Margin	LR: Same species	Ursidae	Z

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

1618a	240fr	Lesser Horseshoe Bat, <i>Rhinolophus hipposideros</i>	Rhinolophidae	A
1618b	240fr	Lyle's Flying Fox, <i>Pteropus lylei</i>	Pteropodidae	A
1618c	240fr	Peter's Dwarf Epauletted Fruit Bat, <i>Micropteropus pusillus</i>	Pteropodidae	A
1618d	240fr	Grey-headed Flying Fox, <i>Pteropus poliocephalus</i>	Pteropodidae	A
	Margin	Bot: Common Pipistrelle, <i>Pipistrellus pipistrellus</i>	Vespertilionidae	Z
1628	SS 950fr	Big Brown Bat, <i>Eptesicus fuscus</i>	Vespertilionidae	(new) A
	Margin	LR: Lesser Short-nosed Fruit Bat, <i>Cynopterus brachyotis</i>	Pteropodidae	Z

DJIBOUTI (continued)**2019 February 27** (Killer Whales) (MS/4 & SS/1)

1620a	240fr	Orca (Killer Whale), <i>Orcinus orca</i> (head out of water)	Delphinidae	A
1620b	240fr	Same species (two diving forward)	Delphinidae	A
1620c	240fr	Same species (one breaching)	Delphinidae	A
1620d	240fr	Same species (two diving L)	Delphinidae	A
	Margin	Bot: Same species	Delphinidae	Z
1630	SS 950fr	Orca (Killer Whale), <i>Orcinus orca</i>	Delphinidae	A
	Margin	LR: Same species	Delphinidae	Z

2019 March 14 (Monkeys) (MS/4 & SS/1)

1675a	250fr	Golden Lion Tamarin, <i>Leontopithecus rosalia</i> (round)	Cebidae	A
1675b	250fr	Pygmy Chimpanzee, <i>Pan paniscus</i> (round)	Hominidae	A
1675c	250fr	South American Squirrel Monkey, <i>Saimiri sciureus</i>	Cebidae	A
1675d	250fr	Toque Macaque, <i>Macaca sinica</i>	Cercopithecidae	A
1683	SS 1000fr	Sumatran Orangutan, <i>Pongo abelii</i>	Hominidae	A
	Margin	LL: Hamadryas Baboon, <i>Papio hamadryas</i>	Cercopithecidae	Z
		R: Western Gorilla, <i>Gorilla gorilla</i>	Hominidae	Z

2019 June 12 (Hippopotamus) (MS/4 & SS/1)

1721a	250fr	Hippopotamus, <i>Hippopotamus amphibius</i> (w/ juvenile)	Hippopotamidae	A
1721b	250fr	Same species (facing L)	Hippopotamidae	A
1721c	250fr	Pygmy Hippopotamus, <i>Hexaprotodon liberiensis</i> (head down)	Hippopotamidae	A
1721d	250fr	Same species (head up)	Hippopotamidae	A
1731	SS 1000fr	Pygmy Hippopotamus, <i>Hexaprotodon liberiensis</i>	Hippopotamidae	A
	Margin	Bkgrd: Hippopotamus, <i>Hippopotamus amphibius</i>	Hippopotamidae	Z

2019 June 12 (Wild Cats) (MS/4 & SS/1)

1722a	250fr	Tiger, <i>Panthera tigris</i> ssp. <i>tigris</i>	Felidae	A
1722b	250fr	Snow Leopard, <i>Panthera uncia</i>	Felidae	A
1722c	250fr	Puma, <i>Puma concolor</i>	Felidae	A
1722d	250fr	Leopard, <i>Panthera pardus</i> ssp. <i>pardus</i>	Felidae	A
1732	1000fr	Jaguar, <i>Panthera onca</i>	Felidae	A
	Margin	Top: Leopard, <i>Panthera pardus</i>	Felidae	Z
		LL & LR: Lion, <i>Panthera leo</i>	Felidae	Z
		Ctr: Zebra, <i>Equus quagga</i>	Equidae	Z

2019 June 12 (Dolphins) (MS/4 & SS/1)

1724a	250fr	Dusky Dolphin, <i>Lagenorhynchus obscurus</i>	Delphinidae	A
1724b	250fr	Long-beaked Common Dolphin, <i>Delphinus capensis</i>	Delphinidae	A
1724c	250fr	Common Bottlenose Dolphin, <i>Tursiops truncatus</i>	Delphinidae	A
1724d	250fr	Atlantic Spotted Dolphin, <i>Stenella frontalis</i>	Delphinidae	A
1734	SS 1000fr	Striped Dolphin, <i>Stenella coeruleoalba</i>	Delphinidae	A
	Margin	Top: Long-beaked Common Dolphin, <i>Delphinus capensis</i>	Delphinidae	Z

2019 June 12 (Extinct Species) (MS/4)

1730c	250fr	†Toolache Wallaby, <i>Macropus greyi</i>	Macropodidae	A
1730d	250fr	†Spanish Ibex, <i>Capra pyrenaica</i>	Bovidae	A

2019 July 27 (Stamps-on-Stamps: WWF) (MS/4 & 2ea SS/1)

1771b	200fr	Hispaniolan Solenodon, <i>Solenodon paradoxus</i> (Dominican Rep. Sc#1158c s-o-s)	Solenodontidae	A
1771c	200fr	Common Warthog, <i>Phacochoerus africanus</i> ssp. <i>aeliani</i> (Djibouti Sc#795b s-o-s)	Suidae	A

DJIBOUTI (continued)

1773	SS 300fr	Hispaniolan Solenodon, <i>Solenodon paradoxus</i> (Dominican Rep. Sc#1158b s-o-s)	Solenodontidae	A
1774	SS 300fr	Common Warthog, <i>Phacochoerus africanus</i> ssp. <i>aeliani</i> (Djibouti Sc#795a s-o-s)	Suidae	A
2019 July 27 (Tigers) (MS/4 & SS/1)				
1790a	250fr	Tiger, <i>Panthera tigris</i> ssp. <i>tigris</i> (two sitting)	Felidae	A
1790b	250fr	Same species (walking R)	Felidae	A
1790c	250fr	Same species (standing in water)	Felidae	A
1790d	250fr	Same species (two lying)	Felidae	A
1802	SS 1000fr	Tiger, <i>Panthera tigris</i> ssp. <i>tigris</i> (also in R margin)	Felidae	A Z
2019 July 27 (Elephants) (MS/4 & SS/1)				
1791a	250fr	African Bush Elephant, <i>Loxodonta africana</i> (w/ two juveniles)	Elephantidae	A
1791b	250fr	African Forest Elephant, <i>Loxodonta cyclotis</i> (facing front)	Elephantidae	A
1791c	250fr	African Forest Elephant, <i>Loxodonta cyclotis</i> (facing R)	Elephantidae	A
1791d	250fr	African Bush Elephant, <i>Loxodonta africana</i> (w/ one juvenile)	Elephantidae	A
	Margin	Bkgrd: African Bush Elephant, <i>Loxodonta africana</i>	Elephantidae	Z
1803	SS 1000fr	African Forest Elephant, <i>Loxodonta cyclotis</i>	Elephantidae	A
	Margin	R: African Bush Elephant, <i>Loxodonta africana</i>	Elephantidae	Z
2019 July 27 (Whales) (MS/4 & SS/1)				
1792a	250fr	Humpback Whale, <i>Megaptera novaeangliae</i> (breaching R)	Balaenopteridae	A
1792b	250fr	Same species (breaching L)	Balaenopteridae	A
1792c	250fr	Same species (w/ juvenile)	Balaenopteridae	A
1792d	250fr	Sperm Whale, <i>Physeter macrocephalus</i>	Physeteridae	A
1804	SS 1000fr	Humpback Whale, <i>Megaptera novaeangliae</i>	Balaenopteridae	A
	Margin	R: Same species (tail)	Balaenopteridae	Z
2019 July 27 (Endangered Species) (MS/4)				
1798a	250fr	Grey Wolf, <i>Canis lupus</i> ssp. <i>baileyi</i>	Canidae	A
1798c	250fr	Spanish Lynx, <i>Lynx pardinus</i>	Felidae	A
1798d	250fr	Eastern Gorilla, <i>Gorilla beringei</i>	Hominidae	A
ECUADOR 2018 December 27 (Cotacachi-Cayapas Ecological Res.) (Strip/5 & Bklt/8)				
2225b	\$3	White-tailed Deer, <i>Odocoileus virginianus</i>	Cervidae	A
2225		Horiz strip/5 (Sc#2225a-e) (perf 13¾×13½)		
2226a	25c	Tayra, <i>Eira barbara</i>	Mustelidae	A
2226b	25c	Spectacled Bear, <i>Tremarctos ornatus</i>	Ursidae	A
2226		Bklt/8 (Sc#2226a-h) (die cut) (s/a)		
ESTONIA 2019 September 9 (Mole) (Single)				
905	65c	European Mole, <i>Talpa europaea</i>	Talpidae	A
ETHIOPIA 2019 February 14 (Wild Animals) (Set/3)				
1880	50c	Aardwolf, <i>Proteles cristatus</i>	Hyaenidae	A
1881	1b	Striped Hyena, <i>Hyaena hyaena</i>	Hyaenidae	A
1882	5b	Spotted Hyena, <i>Crocuta crocuta</i>	Hyaenidae	A
GERMANY 2019 August 1 (Bats) (Bklt/3)				
B1157	80c+30c	Lesser Horseshoe Bat, <i>Rhinolophus hipposideros</i>	Rhinolophidae	A
B1158	95c+40c	Grey Long-eared Bat, <i>Plecotus austriacus</i>	Vespertilionidae	A
B1159	155c+55c	Western Barbastelle, <i>Barbastella barbastellus</i>	Vespertilionidae	A
2019 September 5 (Alexander von Humboldt) (Single)				
3123	80c	Golden-headed Lion Tamarin, <i>Leontopithecus chrysomelas</i>	Cebidae	B

GREAT BRITAIN (Isle of Man)		2019 February 12 (Wildlife) (Block/10 & Bklt/10)		
2005a	(52p)	European Hare, <i>Lepus europaeus</i>	Leporidae	A
2005g	(£1.01)	Red-necked Wallaby, <i>Macropus rufogriseus</i>	Macropodidae	A
2005h	(£1.01)	Western European Hedgehog, <i>Erinaceus europaeus</i>	Erinaceidae	A
2005j	(£1.40)	Long-tailed Field Mouse, <i>Apodemus sylvaticus</i>	Muridae	A
2005		Block/10 (Sc#2005a–j) (perf 12½)		
2006	(52p)	European Hare, <i>Lepus europaeus</i>	Leporidae	A
2010a		Bklt/10 (2ea Sc#2006–10) (die cut 13) (s/a)		
GREAT BRITAIN (Jersey)		2019 September 2 (Mammals & Birds) (SS/2 & SS/6)		
2266	52p	Stoat (Ermine), <i>Mustela erminea</i>	Mustelidae	A
2269	52p	Long-tailed Field Mouse, <i>Apodemus sylvaticus</i>	Muridae	A
2271	52p	Eurasian Red Squirrel, <i>Sciurus vulgaris</i>	Sciuridae	A
2271a		SS/2 (Sc#2268 & Sc#2271)		
2271b		SS/6 (Sc#2266–7)		
MALI		2014 January 11 (Serval) (Set/5)		
1163	200fr	Serval, <i>Leptailurus serval</i>	Felidae	A
1164	300fr	Same species	Felidae	A
1165	400fr	Same species	Felidae	A
1166	500fr	Same species	Felidae	A
1167	1000fr	Same species	Felidae	A
MONTENEGRO		2019 June 15 (Nature Protection) (Set/2)		
445	30c	Eurasian Lynx, <i>Lynx lynx</i>	Felidae	A
ROMANIA		2019 April 25 (Protected Animals) (Set/6 & SS/1)		
6259	1.90l	Eurasian Lynx, <i>Lynx lynx</i>	Felidae	A
6260	2.90l	Brown Bear, <i>Ursus arctos</i>	Ursidae	A
6261	5l	Red Deer, <i>Cervus elaphus</i>	Cervidae	A
6263	12l	Alpine Chamois, <i>Rupicapra rupicapra</i>	Bovidae	A
6264	SS 28.50l	European Bison, <i>Bison bonasus</i>	Bovidae	A
THAILAND		2019 June 14 (70th anniv. Relations w/ Philippines) (Horiz Pair)		
3062a	3b	Asiatic Elephant, <i>Elephas maximus</i>	Elephantidae	A
3062b	3b	Water Buffalo, <i>Bubalus bubalis</i>	Bovidae	A
TUNISIA		2019 May 22 (Endangered Animals) (Set/3 & SS/3)		
1695	250m	Mogod Pony, <i>Equus caballus ssp. ferus</i>	Equidae	A
1696	500m	Addax, <i>Addax nasomaculatus</i>	Bovidae	A
1697	1d	Scimitar-horned Oryx, <i>Oryx dammah</i>	Bovidae	A
1697a		SS/3 (Sc#1695–97)		
UNITED NATIONS		2019 June 11 (Pandas) (SS/3)		
1218a	\$1.15	Giant Panda, <i>Ailuropoda melanoleuca</i>	Ursidae	A
1218b	2fr	Same species	Ursidae	A
1218c	€1.80	Same species	Ursidae	A
	Margin	Top: Same species	Ursidae	
UNITED NATIONS		2019 September 23 (Climate Change) (SS/1)		
1226	SS \$1.15	Polar Bear, <i>Ursus maritimus</i>	Ursidae	A
URUGUAY		2019 July 15 (70th anniv. Relations w/ Israel) (SS/2)		
2678a	22p	Grey Brocket, <i>Mazama gouazoubira</i>	Cervidae	A
2678b	65p	Nubian Ibex, <i>Capra nubiana</i>	Bovidae	A

RATS!

Each year we cycle through the 12 signs of the Chinese zodiac as the stamp world celebrates the Lunar New Year. This year we are overrun with rats. I find it interesting that the majority of the designs depict stylized drawings of the little rodent and very few have natural images. Maybe they are cuter that way.





ORNITHOLOGY

Editor

Glenn G. Mertz, BU1455

Corrections/Updates



Scott Publishing has assigned numbers for issues from Djibouti and Sierra Leone.

DJIBOUTI – Vol. 68(3), p.198

Update:

- 13 December 2019 (Stamps-on-stamps): single is Sc#1596b
 27 February 2019 (Bee-eaters): MS/4 is Sc#1622a–d & SS/1 is Sc#1632
 27 February 2019 (Owls): MS/4 is Sc#1621a–d & SS/1 is Sc#1631
 27 February 2019 (Kingfishers): MS/4 is Sc#1678a–d & SS/1 is Sc#1686

Add missing listing **13 December 2018** (Climate Change)

1595a 240fr Chinstrap Penguin, *Pygoscelis antarcticus*

Spheniscidae

DJIBOUTI – Vol. 68(4), p.265

Update:

27 February 2019 (50th anniv. Apollo 11): MS/4 is Sc#1653d

SIERRA LEONE – Vol. 68(2), pp.133–34

Update:

- 27 April 2018 (205th anniv. A. Wilson): MS/4 is Sc#4751a–d & SS/1 is Sc#4770
 27 April 2018 (Kingfishers): MS/4 is Sc#4748a–d & SS/1 is Sc#4767
 27 April 2018 (Owls): MS/4 is Sc#4747a–d & SS/1 is Sc#4766

New Issues

Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
ANDORRA (Spanish)				
2019 April 26 (Europa: National Birds) (Single)				
462	€1.40	European Robin, <i>Erithacus rubecula</i>	Muscicapidae	A
ANTIGUA				
2018 November 1 (50th anniv. Apollo 11) (MS/3)				
3435a–c	\$6	Bald Eagle, <i>Haliaeetus leucocephalus</i> (on each mission patch)	Accipitridae	C
ARMENIA				
2019 May 21 (Europa: National Birds) (Single)				
1188	350d	Barn Swallow, <i>Hirundo rustica</i>	Hirundinidae	A
AUSTRALIA				
2019 March 5 (Australian Animals) (Set/4, Strip/4, & Bklt/10)				
4940	\$1	Galah, <i>Eolophus roseicapilla</i> (perf 14×14¾)	Cacatuidae	A
4944	\$1	Same species (die cut 11¼) (s/a)		
4944a		Bklt/10 (Sc#4944)		
4947b		Horiz coil strip/4 (Sc4944–47)		
2019 May 7 (Flightless Birds) (Set/3 & Bklt/5)				
4961	\$1	Emu, <i>Dromaius novaehollandiae</i>	Casuariidae	A
4962	\$1	Southern Cassowary, <i>Casuarius casuarius</i>	Casuariidae	
4963	\$2.30	Little Penguin, <i>Eudyptula minor</i> (perf 14×14¾)	Spheniscidae	
4964	\$2.30	Same species (die cut 11¼) (s/a)		
4964a		Bklt/5 (Sc#4964)		

AUSTRALIA (continued)		2019 August 1 (Gardening) (Set/5, SS/5, & Bklt/5)	B
4996	\$1	Striated Pardalote, <i>Pardalotus striatus</i> (perf 14×14¾)	Pardalotidae
4996a		Bklt/4 (Sc#4996)	
4997	\$1	Eastern Spinebill, <i>Acanthorhynchus tenuirostris</i> (perf 14½×14)	Meliphagidae
4997a		Bklt/4 (Sc#4997)	
4998b		SS/5 (Sc#4994–98)	
5001	\$1	Striated Pardalote, <i>Pardalotus striatus</i> (die cut 11¼) (s/a)	Pardalotidae
5001a		Bklt/20 (6ea Sc#4999, Sc#5001, 7ea Sc#5000)	
5002	\$1	Eastern Spinebill, <i>Acanthorhynchus tenuirostris</i> (die cut 10¾)	Meliphagidae
5002a		Bklt/10 (Sc#5002)	
BELARUS		2019 March 12 (Europa: National Birds) (Single)	A
1131	(1,80r)	Greater Spotted Eagle, <i>Clanga clanga</i>	Accipitridae
BELGIUM		2019 January 28 (Elections) (Single)	A
2885	(46c)	Bank Swallow, <i>Riparia riparia</i>	Hirundinidae
		2019 June 17 (Europa: National Birds) (SS/2)	A
2898a	(€4.20)	Eurasian Jay, <i>Garrulus glandarius</i>	Corvidae
2899b	(€4.20)	Eurasian Golden Oriole, <i>Oriolus oriolus</i>	Oriolidae
2898		SS/2 (Sc#2898a–b)	
		2019 March 18 (Registration) (Single)	A
F7	(€4.88)	Bearded Reeding, <i>Panurus biarmicus</i>	Panuridae
BOSNIA & HERZEGOVINA		2018 May 9 (Europa: Bridges) (Pair, SS/2, & Bklt/6)	C
799a	2.50m	Mute Swan, <i>Cygnus olor</i>	Anatidae
799		Horiz pair (Sc#799a–b)	
799c		SS/2 (Sc#799a–b)	
799d		Bklt/6 (3ea Sc#799a–b)	
		2019 May 9 (Europa: National Birds) (Pair, SS/2, & Bklt/6)	A
817a	2.50m	Northern Lapwing, <i>Vanellus vanellus</i>	Charadriidae
817b	2.50m	Horned Lark, <i>Eremophila alpestris</i>	Alaudidae
817		Horiz pair (Sc#817a–b)	
817c		SS/2 (Sc#817a–b)	
817d		Bklt/6 (3ea Sc#817a–b)	
BOSNIA & HERZEGOVINA (Croat)		2019 April 30 (Europa: National Birds) (Pair & SS/2)	A
388a	3m	Great Tit, <i>Parus major</i>	Paridae
388b	3m	Eurasian Blue Tit, <i>Cyanistes caeruleus</i>	Paridae
388		Horiz pair (Sc#388a–b)	
388c		SS/2 (Sc#388a–b)	
BOSNIA & HERZEGOVINA (Serb)		2019 April 24 (Europa: National Birds) (Set/2 & MS/4)	A
612	1,80m	Peregrine Falcon, <i>Falco peregrinus</i>	Falconidae
613	2,70m	Golden Eagle, <i>Aquila chrysaetos</i>	Accipitridae
614a	1,80m	Like Sc#612 (imperf at top)	
614b	1,80m	Like Sc#612 (imperf at bottom)	
614c	2,70m	Like Sc#613 (imperf at top)	
614d	2,70m	Like Sc#613 (imperf at bottom)	
614		MS/4 (Sc#614a–d)	
BOTSWANA		2019 August 15 (Animals of the Nxai Pans) (Set/5 & SS/5)	A
1077	7p	Lanner Falcon, <i>Falco biarmicus</i>	Falconidae
1077a		SS/5 (Sc#1073–77)	

BULGARIA		2018 October 19 (Extinct Animals) (Set/4 & SS/4)	A
4865	2l	Great Auk, <i>Pinguinus impennis</i> (tinted bkgd)	Alcidae
4866d	2l	Same species (white bkgd)	
4866		SS/4 (Sc#4866a–d)	
		2019 February 1 (Fauna) (Set/4 & SS/4)	A
4880	65s	Great Crested Grebe, <i>Podiceps cristatus</i>	Podicipedidae
4881	1l	Little Egret, <i>Egretta garzetta</i>	Ardeidae
4882	1,50l	Great White Pelican, <i>Pelecanus onocrotalus</i>	Pelecanidae
4883	2l	Pygmy Cormorant, <i>Microcarbo pygmaeus</i> (Cap: <i>Phalacrocorax pygmaeus</i>)	Phalacrocoracidae
4886a		SS/4 (Sc#4880–83)	
		2019 April 24 (Europa: National Birds) (Set/2, SS/2, & Bklt/s)	A
4892	95s	Lanner Falcon, <i>Falco biarmicus</i> (perf 13¼)	Falconidae
4893	2l	Hazel Grouse, <i>Bonasia bonasia</i> (perf 13¼)	Phasianidae
4893a		SS/2 (Sc#4892–93)	
4894	95s	Lanner Falcon, <i>Falco biarmicus</i> (perf 13¼ at L)	Falconidae
4894a	95s	Same species (imperf)	Falconidae
4894b		Bklt/4 (2ea Sc#4894 & 4894a)	
4895	2l	Hazel Grouse, <i>Bonasia bonasia</i> (perf 13¼ at L)	Phasianidae
4895a	2l	Same species (imperf)	Falconidae
4895b		Bklt/4 (2ea Sc#4895 & 4895a)	
CAMBODIA		2018 November 16 (Birds) (Set/5 & SS/1)	A
2490	500r	Giant Ibis, <i>Pseudibis gigantea</i>	Threskiornithidae
2491	900r	Red-headed Vulture, <i>Sarcogyps calvus</i>	Accipitridae
2492	2000r	White-shouldered Ibis, <i>Pseudibis davisoni</i>	Threskiornithidae
2493	3000r	Sarus Crane, <i>Antigone antigone</i>	Gruidae
2494	4000r	Greater Adjutant, <i>Leptoptilos dubius</i>	Ciconiidae
2495	SS 6000r	Painted Stork, <i>Mycteria leucocephala</i>	Ciconiidae
CENTRAL AFRICAN REPUBLIC		2019 July 24 (Pigeons) (MS/4 & SS/1)	A Z
Only one of the pigeons is listed in the family of Columbidae. The SS has a pigeon in the margin listed in the Columbidae family. I have listed the others with no scientific names. The four breeds of fancy pigeons could be classified under <i>Columba livia</i> , but as domesticated pigeon varieties.			
a	900fr	Pink-necked Pigeon, <i>Treron vernans</i>	Columbidae
b	900fr	German Beauty Homer (breed of fancy pigeon)	Columbidae
c	900fr	Archangel Pigeon (breed of fancy pigeon)	Columbidae
d	900fr	Fantail Pigeon (breed of fancy pigeon)	Columbidae
N/A	SS 3600fr	West of England Tumbler (breed of fancy pigeon)	Columbidae
	Margin	L: Western Crowned-Pigeon, <i>Goura cristata</i>	Columbidae
		2019 August 22 (Owls) (MS/4 & SS/1)	A Z
a	850fr	Snowy Owl, <i>Bubo scandiacus</i>	Strigidae
b	850fr	Eastern Screech-Owl, <i>Megascops asio</i>	Strigidae
c	850fr	Spectacled Owl, <i>Pulsatrix perspicillata</i>	Strigidae
d	850fr	Eurasian Eagle-Owl, <i>Bubo bubo</i>	Strigidae
N/A	SS 3600fr	Pacific Pygmy-Owl, <i>Glaucidium californicum</i>	Strigidae
	Margin	MR: Barn Owl, <i>Tyto alba</i>	Tytonidae
		UL: Tawny Owl, <i>Strix aluco</i>	Strigidae
		LL: Long-eared Owl, <i>Asio otus</i>	Strigidae

CENTRAL AFRICA (continued)			2019 August 22 (Birds of Prey) (MS/4 & SS/1)	A Z
a	850fr	Ferruginous Hawk, <i>Buteo regalis</i>	Accipitridae	
b	850fr	Steller's Sea-Eagle, <i>Haliaeetus pelagicus</i>	Accipitridae	
c	850fr	Augur Buzzard, <i>Buteo augur</i>	Accipitridae	
d	850fr	Eurasian Griffon, <i>Gyps fulvus</i>	Accipitridae	
N/A	SS 3600fr	White-tailed Eagle, <i>Haliaeetus albicilla</i>	Accipitridae	
	Margin	L: Long-necked Buzzard, <i>Buteo rufinus</i>	Accipitridae	
		Bot & R: Harris's Hawk, <i>Parabuteo unicinctus</i>	Accipitridae	
			2019 September 24 (Indigo Birds) (MS/4 & SS/1)	A Z
a	850fr	Indigo Bunting, <i>Passerina cyanea</i> (facing L)	Cardinalidae	
b	850fr	Same species (facing R– dark blue)	Cardinalidae	
c	850fr	Same species (with juvenile)	Cardinalidae	
d	850fr	Same species (facing R– light blue)	Cardinalidae	
N/A	SS 3600fr	Same species	Cardinalidae	
	Margin	R: Same species	Cardinalidae	
			2019 October 21 (Parrots) (MS/4 & SS/1)	A Z
a	900fr	Red-rumped Parrot, <i>Psephotus haematonotus</i>	Psittaculidae	
b	900fr	Blue-crowned Hanging-Parrot, <i>Loriculus galgulus</i>	Psittaculidae	
c	900fr	Crimson-fronted Parakeet, <i>Psittacara finschi</i>	Psittacidae	
d	900fr	Sun Parakeet, <i>Aratinga solstitialis</i>	Psittacidae	
N/A	SS 3600fr	Kea, <i>Nestor notabilis</i>	Strigopidae	
	Margin	R: Greater Vasa Parrot, <i>Mascarinus vasa</i>	Psittaculidae	
			2019 October 21 (Hummingbirds) (MS/4 & SS/1)	A
a	900fr	Mexican Violetear, <i>Colibri thalassinus</i>	Trochilidae	
b	900fr	Long-billed Starthroat, <i>Heliomaster longirostris</i>	Trochilidae	
c	900fr	Snow-bellied Hummingbird, <i>Amazilia edward</i>	Trochilidae	(new)
d	900fr	Talamanca Hummingbird, <i>Eugenes spectabilis</i>	Trochilidae	(new)
N/A	SS 3600fr	Violet Sabrewing, <i>Campylopterus hemileucurus</i>	Trochilidae	
	Margin	R: Rufous-tailed Hummingbird, <i>Amazilia tzacatl</i>	Trochilidae	
CHILE			2018 October 13 (EXFIL 2018) (Single & SS/1)	A
1661	360p	Andean Condor, <i>Vultur gryphus</i>	Cathartidae	
1662	SS 1500p	Same species	Cathartidae	
CHINA (People's Republic)			2018 August 17 (Geese) (Single)	A
4570	\$1.20	Swan Goose, <i>Anser cygnoides</i>	Anatidae	
COLOMBIA			2018 August 24 (Risaralda Bird Festival) (MS/15)	A
Ten stamps depict birds, the other five feature butterflies.				
1492a	1000p	Turquoise Dacnis, <i>Dacnis hartlaubi</i>	Thraupidae	(new)
1492b	1000p	Cauca Guan, <i>Penelope perspicax</i>	Cracidae	
1492c	1000p	Orange-breasted Fruiteater, <i>Pipreola jucunda</i>	Cotingidae	
1492d	1000p	Velvet-purple Coronet, <i>Boissonneaua jardini</i>	Trochilidae	
1492e	1000p	Apical Flycatcher, <i>Myiarchus apicalis</i>	Tyrannidae	Vol. 67(4)
1492k	1000p	Purple-throated Woodstar, <i>Calliphlox mitchellii</i>	Trochilidae	
1492l	1000p	Grayish Piculet, <i>Picumnus granadensis</i>	Picidae	Vol. 67(4)
1492m	1000p	Golden-naped Tanager, <i>Tangara ruficervix</i>	Thraupidae	Vol. 67(4)
1492n	1000p	Black-and-gold Tanager, <i>Bangsia melanochlamys</i>	Thraupidae	Vol. 67(4)
1492o	1000p	Multicolored Tanager, <i>Chlorochrysa nitidissima</i>	Thraupidae	Vol. 67(4)

COLOMBIA (continued)		2019 April 5 (National Parks) (MS/10)		A
1502e	5000p	Tyrian Metaltail, <i>Metallura tyrianthina</i>	Trochilidae	
1502g	5000p	Oilbird, <i>Steatornis caripensis</i>	Steatornithidae	
CZECH REPUBLIC		2019 April 24 (Europa: National Birds) (Single)		A
3788	(39k)	Common Kingfisher, <i>Alcedo atthis</i> (inscr. "E")	Alcedinidae	
DENMARK		2019 May 16 (Europa: National Birds) (SS/2)		A Z
1828a	30k	Swan, <i>Cygnus olor</i> (w/ three chicks)	Anatidae	
1828b	30k	Same species (w/ one chick)	Anatidae	
1828	Margin	UL: Same species		
ECUADOR		2018 December 27 (50th anniv. Ecological Reserve) (Strip/5 & Bklt)		A
2225a	\$3	Silvery Grebe, <i>Podiceps occipitalis</i>	Podicipedidae	
2225d	\$3	White-crested Elaenia, <i>Elaenia albiceps</i>	Tyrannidae	Vol. 68(2)
2225		Horiz strip/5 (Sc#2225a-e) (perf 13¾×13½)		
2226c	50c	Black-chested Buzzard-Eagle, <i>Geranoaetus melanoleucus</i>	Accipitridae	
2226d	50c	Scarlet-bellied Mountain-Tanager, <i>Anisognathus igniventris</i>	Thraupidae	Vol. 68(2)
2226e	75c	Black-breasted Puffleg, <i>Eriocnemis nigrivestis</i>	Trochilidae	Vol. 68(2)
2226		Bklt/8 (Sc#2226a-h) (die cut) (s/a)		
		2019 May 2 (Birds) (2ea Bklt/8)		A
2229a	25c	Great Thrush, <i>Turdus fuscater</i>	Turdidae	Vol. 68(3)
2229b	25c	Rufous-collared Sparrow, <i>Zonotrichia capensis</i>	Passerellidae	
2229c	50c	Saffron Finch, <i>Sicalis flaveola</i>	Thraupidae	
2229d	50c	Blue-and-yellow Tanager, <i>Pipraeidea bonariensis</i>	Thraupidae	
2229e	75c	Tropical Mockingbird, <i>Mimus gilvus</i>	Mimidae	
2229f	75c	Vermilion Flycatcher, <i>Pyrocephalus rubinus</i>	Tyrannidae	
2229g	\$1	Rusty Flowerpiercer, <i>Diglossa sittoides</i>	Thraupidae	Vol. 68(3)
2229h	\$1	Blue-and-yellow Swallow, <i>Pygochelidon cyanoleuca</i>	Hirundinidae	
2229		Bklt/8 (Sc#2229a-h)		
2230a	25c	Black-and-white Seedeater, <i>Sporophila luctuosa</i>	Thraupidae	Vol. 68(3)
2230b	25c	Blackburnian Warbler, <i>Setophaga fusca</i>	Parulidae	
2230c	50c	Blue-Gray Tanager, <i>Thraupis episcopus</i>	Thraupidae	
2230d	50c	Eared Dove, <i>Zenaida auriculata</i>	Columbidae	
2230e	75c	Southern Beardless-Tyrannulet, <i>Camptostoma obsoletum</i>	Tyrannidae	Vol. 68(3)
2230f	75c	Giant Hummingbird, <i>Patagona gigas</i>	Trochilidae	
2230g	\$1	Golden Grosbeak, <i>Pheucticus chrysogaster</i>	Cardinalidae	
2230h	\$1	Golden-rumped Euphonia, <i>Euphonia cyanocephala</i>	Fringillidae	
2230		Bklt/8 (Sc#2230a-h)		
ETHIOPIA		2019 January 24 (Birds) (Set/5)		A
1875	40c	White-bellied Go-away-Bird, <i>Corythaixoides leucogaster</i>	Musophagidae	Vol. 68(2)
1876	50c	Long-tailed Nightjar, <i>Caprimulgus climacurus</i>	Caprimulgidae	
1877	60c	Dusky Turtle Dove, <i>Streptopelia lugens</i>	Columbidae	Vol. 68(2)
1878	2b	Black-billed Barbet, <i>Lybius guifsobalito</i>	Lybiidae	Vol. 68(2)
1879	3b	Red-fronted Tinkerbird, <i>Pogoniulus pusillus</i>	Lybiidae	Vol. 68(2)
FALKLAND ISLANDS		2019 August 5 (Feathers of the listed birds) (Set/6)		A
1252	32p	Striated Caracara, <i>Phalcoboenus australis</i>	Falconidae	
1253	32p	Black-backed Albatross, <i>Thalassarche melanophris</i>	Diomedidae	
1254	78p	Yellow-billed Teal, <i>Anas flavirostris</i>	Anatidae	
1255	78p	Barn Owl, <i>Tyto alba</i>	Tytonidae	
1256	£1.26	Black-crowned Night-Heron, <i>Nycticorax nycticorax</i>	Ardeidae	
1257	£1.26	King Penguin, <i>Aptenodytes patagonicus</i>	Spheniscidae	

FIJI			2018–2019 (Surcharges) (Set/2)	A
1407A	3c	Azure-crested Flycatcher, <i>Myiagra azureocapilla</i> (Sc#729 surch: originally captioned Blue-crested Broadbill)	Monarchidae	
1407B	40c	Western Swamphen, <i>Porphyrio porphyrio</i> (Sc#733 surch: originally captioned Purple Swamphen)	Rallidae	
GIBRALTAR			2019 February 5 (Europa: National Birds) (Set/2 & SS/2)	A
1700	£1.66	Barbary Partridge, <i>Alectoris barbara</i> (w/ four chicks)	Phasianidae	
1701	£1.66	Same species (w/ one chick)	Phasianidae	
1701a		SS/2 (Sc#1700–01)		
GREAT BRITAIN (Guernsey)			2019 April 1 (Europa: National Birds) (Set/6, SS/2, & SS/6)	A
1488	48p	Atlantic Puffin, <i>Fratercula arctica</i>	Alcidae	
1489	65p	Eurasian Linnet, <i>Carduelis cannabina</i>	Fringillidae	
1490	66p	Eurasian Bullfinch, <i>Pyrrhula pyrrhula</i>	Fringillidae	
1491	80p	European Goldfinch, <i>Carduelis carduelis</i>	Fringillidae	
1491a		SS/2 (Sc#1489 & Sc#1491)		
1492	90p	European Starling, <i>Sturnus vulgaris</i>	Sturnidae	
1493	98p	Common Kingfisher, <i>Alcedo atthis</i>	Alcedinidae	
1493a		SS/6 (Sc#1488–93)		
GREAT BRITAIN (Jersey)			2019 March 5 (Europa: National Birds) (Set/6 & SS/2)	A
2215	50p	Eurasian Kestrel, <i>Falco tinnunculus</i>	Falconidae	
2216	65p	Barn Swallow, <i>Hirundo rustica</i>	Hirundinidae	
2217	76p	Mute Swan, <i>Cygnus olor</i>	Anatidae	
2218	82p	Indian Peafowl, <i>Pavo cristatus</i>	Phasianidae	
2219	94p	Common Kingfisher, <i>Alcedo atthis</i>	Alcedinidae	
2219a		SS/2 (Sc#2217 & Sc#2219)		
2220	€1.12	White Stork, <i>Ciconia ciconia</i>	Ciconiidae	
GRENADA GRENADINES			2019 March 12 (Wood Stork) (MS/6)	A Z
3023a	\$1	Wood Stork, <i>Mycteria americana</i> (in flight facing L)	Ciconiidae	
3023b	\$2	Same species (in flight facing R)	Ciconiidae	
3023c	\$3	Same species (taking off facing R)	Ciconiidae	
3023d	\$4	Same species (standing facing R)	Ciconiidae	
3023e	\$5	Same species (standing facing L)	Ciconiidae	
3023f	\$6	Same species (standing facing L)	Ciconiidae	
3023	Margin	Top: Same species	Ciconiidae	
GUINEA			2019 June 26 (Birds of Prey) (MS/4 & SS/1)	A Z
a	12500fr	Peregrine Falcon, <i>Falco peregrinus</i>	Falconidae	
b	12500fr	Common Buzzard, <i>Buteo buteo</i>	Accipitridae	
c	12500fr	King Vulture, <i>Sarcoramphus papa</i>	Cathartidae	
d	12500fr	Osprey, <i>Pandion haliaetus</i>	Pandionidae	
N/A	SS 50000fr	Northern Goshawk, <i>Accipiter gentilis</i>	Accipitridae	
	Margin	R: Golden Eagle, <i>Aquila chrysaetos</i>	Accipitridae	
			2019 June 26 (Kingfishers) (MS/4 & SS/1)	A Z
a	12500fr	Pied Kingfisher, <i>Ceryle rudis</i>	Alcedinidae	
b	12500fr	Collared Kingfisher, <i>Todiramphus chloris</i>	Alcedinidae	
c	12500fr	Black-backed Dwarf-Kingfisher, <i>Ceyx erithaca</i>	Alcedinidae	
d	12500fr	Banded Kingfisher, <i>Lacedo pulchella</i>	Alcedinidae	
N/A	SS 50000fr	Belted Kingfisher, <i>Megaceryle alcyon</i>	Alcedinidae	
	Margin	R: Woodland Kingfisher, <i>Halcyon senegalensis</i>	Alcedinidae	

GUINEA (continued)		2019 August 28 (Extinct Species) (MS/4)	A
c	12500fr	Dodo, <i>Raphus cucullatus</i>	Columbidae
		2019 August 28 (Guineafowl) (MS/4 & SS/1)	A Z
a	12500fr	Helmeted Guineafowl, <i>Numida meleagris</i> (flock)	Numididae
b	12500fr	Same species (in flight)	Numididae
c	12500fr	Same species (three walking)	Numididae
d	12500fr	Same species (five standing)	Numididae
N/A	SS 50000fr	Same species	Numididae
	Margin	Top: Same species	Ciconiidae
		2019 August 28 (Owls) (MS/4 & SS/1)	A Z
a	12500fr	Barn Owl, <i>Tyto alba</i>	Tytonidae
b	12500fr	Eurasian Pygmy-Owl, <i>Glaucidium passerinum</i>	Strigidae
c	12500fr	L: Short-eared Owl, <i>Asio flammeus</i>	Strigidae
		R: Northern Hawk-Owl, <i>Surnia ulula</i>	Strigidae
d	12500fr	Great Gray Owl, <i>Strix nebulosa</i>	Strigidae
N/A	SS 50000fr	Snowy Owl, <i>Bubo scandiacus</i>	Strigidae
	Margin	Top: Short-eared Owl, <i>Asio flammeus</i>	Strigidae
		2019 August 28 (Ducks) (MS/4 & SS/1)	A Z
a	12500fr	Red-crested Pochard, <i>Netta rufina</i>	Anatidae
b	12500fr	Harlequin Duck, <i>Histrionicus histrionicus</i>	Anatidae
c	12500fr	Common Eider, <i>Somateria mollissima</i>	Anatidae
d	12500fr	Common Shelduck, <i>Tadorna tadorna</i>	Anatidae
N/A	SS 50000fr	Mandarin Duck, <i>Aix galericulata</i>	Anatidae
	Margin	Top: Ruddy Shelduck, <i>Tadorna ferruginea</i>	Anatidae
		2019 August 28 (Hummingbirds) (MS/4 & SS/1)	A Z
a	12500fr	Violet Sabrewing, <i>Campylopterus hemileucurus</i>	Trochilidae
b	12500fr	L: Ruby-throated Hummingbird, <i>Archilochus colubris</i>	Trochilidae
		R: Costa's Hummingbird, <i>Calypte costae</i>	Trochilidae
c	12500fr	L: Rufous Hummingbird, <i>Selasphorus rufus</i>	Trochilidae
		R: Mexican Violetear, <i>Colibri thalassinus</i>	Trochilidae
d	12500fr	Anna's Hummingbird, <i>Calypte anna</i>	Trochilidae
N/A	SS 50000fr	White-necked Jacobin, <i>Florisuga mellivora</i>	Trochilidae
	Margin	UL: Same species	
		UR: Mexican Violetear, <i>Colibri thalassinus</i>	Trochilidae
		2019 August 28 (Hornbills) (MS/4 & SS/1)	A Z
a	12500fr	Wreathed Hornbill, <i>Rhyticeros undulates</i>	Bucerotidae
b	12500fr	Eastern Yellow-billed Hornbill, <i>Tockus flavirostris</i>	Bucerotidae
c	12500fr	Southern Ground-Hornbill, <i>Bucorvus leadbeateri</i>	Bucorvidae
d	12500fr	Abyssinian Ground-Hornbill, <i>Bucorvus abyssinicus</i>	Bucorvidae
N/A	SS 50000fr	Silvery-cheeked Hornbill, <i>Bycanistes brevis</i>	Bucerotidae
	Margin	UL: Trumpeter Hornbill, <i>Bycanistes bucinator</i>	Bucerotidae
		UR: Great Hornbill, <i>Buceros bicornis</i>	Bucerotidae
		2019 August 28 (Antarctica) (MS/4 & SS/1)	A
b	12500fr	Adelie Penguin, <i>Pygoscelis adeliae</i>	Spheniscidae
N/A	SS Margin	Top: Emperor Penguin, <i>Aptenodytes forsteri</i>	Spheniscidae

GUINEA (continued)		2019 November 16 (Pigeons) (MS/4 & SS/1)	A Z
a	12500fr	Stock Dove, <i>Columba oenas</i>	Columbidae
b	12500fr	Speckled Pigeon, <i>Columba guinea</i>	Columbidae
c	12500fr	Laughing Dove, <i>Streptopelia senegalensis</i>	Columbidae
d	12500fr	White-crowned Pigeon, <i>Patagioenas leucocephala</i>	Columbidae
N/A	SS 50000fr	Ruddy Quail-Dove, <i>Geotrygon montana</i>	Columbidae
	Margin	Top: Red-eyed Dove, <i>Streptopelia semitorquata</i>	Columbidae
		LR: Nicobar Pigeon, <i>Caloenas nicobarica</i>	Columbidae
GUINEA-BISSAU		2019 March 20 (Kingfishers) (MS/4 & SS/1)	A Z
a	640fr	Black-capped Kingfisher, <i>Halcyon pileata</i>	Alcedinidae
b	640fr	Pied Kingfisher, <i>Ceryle rudis</i>	Alcedinidae
c	640fr	White-throated Kingfisher, <i>Halcyon smyrnensis</i>	Alcedinidae
d	640fr	Common Kingfisher, <i>Alcedo atthis</i>	Alcedinidae
N/A	SS 3300fr	Ruddy Kingfisher, <i>Halcyon coromanda</i>	Alcedinidae
	Margin	L: Common Kingfisher, <i>Alcedo atthis</i>	Alcedinidae
		2019 March 20 (Lighthouses) (MS/4)	B
a	640fr	Arctica Tern, <i>Sterna paradisaea</i>	Laridae
d	640fr	Horned Puffin, <i>Fratercula corniculata</i>	Alcidae
		2019 April 17 (Antarctica) (MS/5+1 label & SS/1)	A Z
c	640fr	King Penguin, <i>Aptenodytes patagonicus</i>	Spheniscidae
d	640fr	Gentoo Penguin, <i>Pygoscelis papua</i>	Spheniscidae
	Label	Emperor Penguin, <i>Aptenodytes forsteri</i>	Spheniscidae
N/A	SS Margin	R: King Penguin, <i>Aptenodytes patagonicus</i>	Spheniscidae
		2019 June 18 (Parrots) (MS/5+1 label & SS/1+1 label)	A Z
a	640fr	Palm Cockatoo, <i>Probosciger aterrimus</i>	Cacatuidae
b	640fr	Sun Parakeet, <i>Aratinga solstitialis</i>	Psittacidae
c	640fr	Eclectus Parrot, <i>Eclectus roratus</i>	Psittaculidae
d	640fr	New Zealand Kaka, <i>Nestor meridionalis</i>	Strigopidae
e	640fr	Yellow-collared Lovebird, <i>Agapornis personatus</i>	Psittaculidae
	Label	Fischer's Lovebird, <i>Agapornis fischeri</i>	Psittaculidae
N/A	SS 3300fr	Blue-and-yellow Macaw, <i>Ara ararauna</i>	Psittacidae
	Margin	R: Palm Cockatoo, <i>Probosciger aterrimus</i>	Cacatuidae
	Label	Fischer's Lovebird, <i>Agapornis fischeri</i>	Psittaculidae
		2019 July 17 (Extinct Animals) (MS/4)	A
b	640fr	Dodo, <i>Raphus cucullatus</i>	Columbidae
		2019 August 13 (Owls) (MS/4 & SS/1)	A Z
a	800fr	Eastern Screech-Owl, <i>Megascops asio</i> (one owl)	Strigidae
b	800fr	Great Horned Owl, <i>Bubo virginianus</i>	Strigidae
c	800fr	Short-eared Owl, <i>Asio flammeus</i>	Strigidae
d	800fr	Eastern Screech-Owl, <i>Megascops asio</i> (two owls)	Strigidae
N/A	SS 3300fr	Long-eared Owl, <i>Asio otus</i>	Strigidae
	Margin	LR: Eastern Screech-Owl, <i>Megascops asio</i>	Strigidae
		UR: Long-eared Owl, <i>Bubo virginianus</i>	Strigidae
		2019 August 13 (Bee-eaters) (MS/4 & SS/1)	A Z
a	800fr	Green Bee-eater, <i>Merops orientalis</i>	Meropidae
b	800fr	Rainbow Bee-eater, <i>Merops ornatus</i>	Meropidae
c	800fr	Red-breasted Bee-eater, <i>Nyctornis amictus</i>	Meropidae
d	800fr	Northern Carmine Bee-eater, <i>Merops nubicus</i>	Meropidae

GUINEA-BISSAU (continued)

N/A	SS 3300fr	Chestnut-headed Bee-eater, <i>Merops leschenaultia</i>	Meropidae	
	Margin	R: Blue-bearded Bee-eater, <i>Nyctornis athertoni</i>	Meropidae	
2019 November 10 (Pigeons) (MS/4 & SS/1)				A Z
a	800fr	Metallic Pigeon, <i>Columba vitiensis</i> ssp. <i>griseogularis</i>	Columbidae	
b	800fr	Silvery Wood-Pigeon, <i>Columba argentina</i>	Columbidae	Vol. 68(4)
c	800fr	Common Wood-Pigeon, <i>Columba palumbus</i>	Columbidae	
d	800fr	Beautiful Fruit-Dove, <i>Ptilinopus pulchellus</i>	Columbidae	Vol. 68(4)
	Margin	R & LL: Rock Pigeon, <i>Columba livia</i>	Columbidae	
N/A	SS 3300fr	Eurasian Collared-Dove, <i>Streptopelia decaocto</i>	Columbidae	
	Margin	R: Rock Pigeon, <i>Columba livia</i>	Columbidae	
		L: Pied Imperial-Pigeon, <i>Ducula bicolor</i>	Columbidae	
2019 November 10 (Sea Birds) (MS/4 & SS/1)				A Z
a	800fr	Northern Gannet, <i>Morus bassanus</i>	Sulidae	
b	800fr	Razorbill, <i>Alca torda</i>	Alcidae	
c	800fr	Wandering Albatross, <i>Diomedea exulans</i> ssp. <i>giboni</i>	Diomedeidae	
d	800fr	Masked Booby, <i>Sula dactylatra</i>	Sulidae	
	Margin	LL & LR: Nazca Booby, <i>Sula granti</i>	Sulidae	
N/A	SS 3300fr	Red-tailed Tropicbird, <i>Phaethon aethereus</i> ssp. <i>mesonauta</i>	Phaethontidae	
	Margin	L & R: Common Murre, <i>Uria aalge</i>	Alcidae	
ISRAEL 2019 March 5 (Birds) (Horiz strip/5)				A
2213a	(2.50s)	European Bee-eater, <i>Merops apiaster</i>	Meropidae	
2213b	(2.50s)	Blue-cheeked Bee-eater, <i>Merops persicus</i>	Meropidae	
2213c	(2.50s)	Green Bee-eater, <i>Merops orientalis</i>	Meropidae	
2213d	(2.50s)	Common Kingfisher, <i>Alcedo atthis</i>	Alcedinidae	
2213e	(2.50s)	European Roller, <i>Coracias garrulus</i>	Coraciidae	
2019 July 16 (50th anniv. Relations w/ Singapore) (Set/2)				A
2222	2.50s	L: Crimson Sunbird, <i>Aethopyga siparaja</i>	Nectariniidae	
		R: European Hoopoe, <i>Upupa epops</i>	Upupidae	
2223	7.40s	L: Eurasian Hoopoe, <i>Upupa epops</i>	Upupidae	
		R: Crimson Sunbird, <i>Aethopyga siparaja</i>	Nectariniidae	
2016, July 16 (Tourism) (Set/3)				B
2226	2.50s	Common Crane, <i>Grus grus</i> (w/ bird watcher)	Gruidae	
LATVIA 2019 April 26 (Europa: National Birds) (Set/2 & Bklt/4)				A
1018	78c	White Wagtail, <i>Motacilla alba</i>	Motacillidae	
1018a		Bklt/4 (Sc#1018)		
1019	€1.71	Same species	Motacillidae	
2019 August 16 (Bird) (Single)				A C
1028	78c	Lesser Spotted Eagle, <i>Clanga pomarina</i>	Accipitridae	
		UR: Common Kingfisher, <i>Alcedo atthis</i> (small)	Alcedinidae	
MALDIVIVE ISLANDS 2019 August 29 (Birds of Maldives) (MS/4 & SS/1)				A Z
a	20m	Striated Heron, <i>Butorides striata</i>	Ardeidae	
b	20m	Indian Pond-Heron, <i>Ardeola grayii</i> ssp. <i>phillipsi</i>	Ardeidae	
c	20m	Little Egret, <i>Egretta garzetta</i>	Ardeidae	
d	20m	White-breasted Waterhen, <i>Amaurornis phoenicurus</i>	Rallidae	
N/A	SS 60m	Asian Koel, <i>Eudynamys scolopaceus</i>	Cuculidae	
	Margin	Bot: Great Bittern, <i>Botaurus stellaris</i>	Ardeidae	
		R: Eurasian Hoopoe, <i>Upupa epops</i>	Upupidae	

MALDIVE ISLANDS (continued)			2019 August 29 (Birds of Prey) (MS/4 & SS/1)	A Z
a	22m	Spotted Eagle-Owl, <i>Bubo africanus</i>	Strigidae	
b	22m	Ornate Hawk-Eagle, <i>Spizaetus ornatus</i>	Accipitridae	
c	22m	Crested Serpent –Eagle, <i>Spilornis cheela</i>	Accipitridae	
d	22m	Red Kite, <i>Milvus milvus</i>	Accipitridae	
N/A	SS 70m	Bald Eagle, <i>Haliaeetus leucocephalus</i>	Accipitridae	
	Margin	Bot: Same species	Accipitridae	
			2019 August 29 (Bee-eaters) (MS/4 & SS/1)	A Z
a	22m	Blue-bearded Bee-eater, <i>Nyctornis athertoni</i>	Meropidae	
b	22m	Chestnut-headed Bee-eater, <i>Merops leschenaultia</i>	Meropidae	
c	22m	White-fronted Bee-eater, <i>Merops bullockoides</i>	Meropidae	
d	22m	Green Bee-eater, <i>Merops orientalis</i>	Meropidae	
N/A	SS 70m	European Bee-eater, <i>Merops apiaster</i>	Meropidae	
	Margin	R: European Bee-eater, <i>Merops apiaster</i>	Meropidae	
		Bot: Blue-throated Bee-eater, <i>Merops viridis</i>	Meropidae	
			2019 October 30 (Hornbills) (MS/4 & SS/1)	A Z
a	22m	Wreathed Hornbill, <i>Rhyticeros undulatus</i>	Bucerotidae	
b	22m	Southern Yellow-billed Hornbill, <i>Tockus leucomelas</i>	Bucerotidae	
c	22m	Wreathed Hornbill, <i>Rhyticeros undulatus</i>	Bucerotidae	
d	22m	Wrinkled Hornbill, <i>Rhabdotorrhinus corrugatus</i>	Bucerotidae	
N/A	SS 70m	Great Hornbill, <i>Buceros bicornis</i>	Bucerotidae	
	Margin	UR: Oriental Pied-Hornbill, <i>Anthracoceros albirostris</i>	Bucerotidae	
		LL: Great Hornbill, <i>Buceros bicornis</i>	Bucerotidae	
		LR: Oriental Pied-Hornbill, <i>Anthracoceros albirostris</i>	Bucerotidae	
MALTA			2019 May 9 (Europa: National Birds) (Set/2 & MS/5+1 label)	A
1649	59c	Blue Rock Thrush, <i>Monticola solitarius</i>	Turdidae	
1649a		MS/5+1 label (Sc#1649)		
1650	€2	Same species	Turdidae	
MOLDOVA			2019 April 19 (Europa: National Birds) (Set/2 & 2ea MS/3+1 label)	A
1031	11l	White Stork, <i>Ciconia ciconia</i>	Ciconiidae	
1031a		MS/3+1 label (Sc#1031)		
1032	11l	Golden Eagle, <i>Aquila chrysaetos</i>	Accipitridae	
1032a		MS/3+1 label (Sc#1032)		
MONTENEGRO			2019 May 19 (Europa: National Birds) (Single)	A
442	95c	Eurasian Capercaillie, <i>Tetrao urogallus</i>	Phasianidae	
MOZAMBIQUE			2019 August 16 (Hummingbirds) (MS/4 & SS/1)	A Z
a	116m	Anna's Hummingbird, <i>Calypte anna</i>	Trochilidae	
b	116m	Tufted Coquette, <i>Lophornis ornatus</i>	Trochilidae	
c	116m	Costa's Hummingbird, <i>Calypte costae</i>	Trochilidae	
d	116m	Rufous Hummingbird, <i>Selasphorus rufus</i>	Trochilidae	
N/A	SS 300m	Glittering-bellied Emerald, <i>Chlorostilbon lucidus</i>	Trochilidae	
	Margin	R: Bee Hummingbird, <i>Mellisuga helenae</i>	Trochilidae	
			2019 August 16 (Owls) (MS/4 & SS/1)	A Z
a	116m	Northern Saw-whet Owl, <i>Aegolius acadicus</i>	Strigidae	
b	116m	Barn Owl, <i>Tyto alba</i>	Tytonidae	
c	116m	Lesser Sooty Owl, <i>Tyto multipunctata</i>	Tytonidae	
d	116m	Eastern Screech-Owl, <i>Megascops asio</i>	Strigidae	
N/A	SS 300m	Long-eared Owl, <i>Asio otus</i>	Strigidae	
	Margin	R: Great Gray Owl, <i>Strix nebulosa</i>	Strigidae	

MOZAMBIQUE (continued)		2019 August 16 (Kingfishers) (MS/4 & SS/1)	A Z
a	116m	Ruddy Kingfisher, <i>Halcyon coromanda</i>	Alcedinidae
b	116m	Collared Kingfisher, <i>Todiramphus chloris</i>	Alcedinidae
c	116m	Common Kingfisher, <i>Alcedo atthis</i>	Alcedinidae
d	116m	Blue-winged Kookaburra, <i>Dacelo leachii</i>	Alcedinidae
N/A	SS 300m	Belted Kingfisher, <i>Megaceryle alcyon</i>	Alcedinidae
	Margin	R: Common Kingfisher, <i>Alcedo atthis</i>	Alcedinidae
		2019 August 16 (Warblers) (MS/4 & SS/1)	A Z
a	116m	Yellow-rumped Warbler, <i>Setophaga coronata</i>	Parulidae
b	116m	Northern Parula, <i>Setophaga americana</i>	Parulidae
c	116m	Ovenbird, <i>Seiurus aurocapilla</i>	Parulidae
d	116m	MacGillivray's Warbler, <i>Geothlypis tolmiei</i>	Parulidae
N/A	SS 300m	American Redstart, <i>Setophaga ruticilla</i>	Parulidae
	Margin	R: Black-and-white Warbler, <i>Mniotilta varia</i>	Parulidae
		2019 August 16 (210th anniv. Charles Darwin) (MS/4)	A
a	116m	UL: Eurasian Bullfinch, <i>Pyrrhula pyrrhula</i>	Fringillidae
		LR: Mangrove Finch, <i>Camarhynchus heliobates</i>	Emberizidae
		2019 August 16 (Birds of Mozambique) (MS/4 & SS/1)	A Z
a	116m	White-browed Robin-Chat, <i>Cossypha heuglini</i>	Muscicapidae
b	116m	Red-tailed Tropicbird, <i>Phaethon rubricauda</i>	Phaethontidae
c	116m	Malachite Sunbird, <i>Nectarinia famosa</i>	Nectariniidae
d	116m	Spur-winged Goose, <i>Plectropterus gambensis</i>	Anatidae
N/A	SS 300m	Klaas's Cuckoo, <i>Chrysococcyx klaas</i>	Cuculidae
	Margin	R: Greater Flamingo, <i>Phoenicopterus roseus</i>	Phoenicopteridae
		2019 October 1 (Birds of Prey) (MS/4 & SS/1)	A Z
a	116m	Northern Harrier, <i>Circus hudsonius</i>	Accipitridae
b	116m	Red Kite, <i>Milvus milvus</i>	Accipitridae
c	116m	Osprey, <i>Pandion haliaetus</i>	Pandionidae
d	116m	Common Buzzard, <i>Buteo buteo</i>	Accipitridae
N/A	SS 300m	Eurasian Marsh-Harrier, <i>Circus aeruginosus</i>	Accipitridae
	Margin	Bot: Andean Condor, <i>Vultur gryphus</i>	Cathartidae
		2019 October 1 (Water Birds) (MS/4 & SS/1)	A Z
a	116m	African Jacana, <i>Actophilornis africanus</i>	Jacanidae
b	116m	Great Cormorant, <i>Phalacrocorax carbo</i>	Phalacrocoracidae
c	116m	American Dipper, <i>Cinclus mexicanus</i>	Cinclidae
d	116m	Northern Pintail, <i>Anas acuta</i>	Anatidae
N/A	SS 300m	Crab Plover, <i>Dromas ardeola</i>	Dromadidae
	Margin	Bot: Black-legged Kittiwake, <i>Rissa tridactyla</i>	Laridae
		2019 October 1 (Hornbills) (MS/4 & SS/1)	A Z
a	116m	Western Red-billed Hornbill, <i>Tockus kempfi</i>	Bucerotidae
b	116m	Indian Gray Hornbill, <i>Ocyrceros birostris</i>	Bucerotidae
c	116m	Great Hornbill, <i>Buceros bicornis</i>	Bucerotidae
d	116m	Rhinoceros Hornbill, <i>Buceros rhinoceros</i>	Bucerotidae
N/A	SS 300m	Oriental Pied-Hornbill, <i>Anthracoceros albirostris</i>	Bucerotidae
	Margin	Bot: Wreathed Hornbill, <i>Rhyticeros undulates</i>	Bucerotidae
		2019 October 1 (Penguins) (MS/4 & SS/1)	A Z
a	116m	Emperor Penguin, <i>Aptenodytes forsteri</i> (Cap: Manchot Empereur)	Spheniscidae
b	116m	Yellow-eyed Penguin, <i>Megadyptes antipodes</i>	Spheniscidae

MOZAMBIQUE (continued)

c	116m	Little Penguin, <i>Eudyptula minor</i>	Spheniscidae
d	116m	Jackass Penguin, <i>Spheniscus demersus</i>	Spheniscidae
N/A	SS 300m	Moseley's Rockhopper Penguin, <i>Eudyptes moseleyi</i>	Spheniscidae
	Margin	Bot: King Penguin, <i>Aptenodytes patagonicus</i>	Spheniscidae

2019 October 1 (Sunbirds) (MS/4 & SS/1)**A Z**

a	116m	Collared Sunbird, <i>Hedydipna collaris</i>	Nectariniidae
b	116m	Seychelles Sunbird, <i>Cinnyris dussumieri</i>	Nectariniidae
c	116m	Ruby-cheeked Sunbird, <i>Chalcoparia singalensis</i>	Nectariniidae
d	116m	Olive-backed Sunbird, <i>Cinnyris jugularis</i>	Nectariniidae
N/A	SS 300m	Green-tailed Sunbird, <i>Aethopyga nipalensis</i>	Nectariniidae
	Margin	Bot: Mrs. Gould's Sunbird, <i>Aethopyga gouldiae</i>	Nectariniidae

NEW ZEALAND**2019 October 2** (250th anniv. Maori Encounter) (Set/5 & SS/5)**B**

2883	\$1.30	L: Great Egret, <i>Ardea alba</i> (ptg by Michel Tuffery)	Ardeidae
		LR: White-faced Heron, <i>Egretta novaehollandiae</i>	Ardeidae
2887a		SS/5 (Sc#2883–87)	

NIGER**2019 April 24** (Hornbills) (MS/4 & SS/1)**A Z**

a	800fr	Great Hornbill, <i>Buceros bicornis</i>	Bucerotidae
b	800fr	Tanzanian Red-billed Hornbill, <i>Tockus ruahae</i>	Bucerotidae
c	800fr	Knobbed Hornbill, <i>Rhyticeros cassidix</i>	Bucerotidae
d	800fr	Sri Lanka Gray Hornbill, <i>Ocyrceros gingalensis</i>	Bucerotidae
N/A	SS 3300fr	Rhinoceros Hornbill, <i>Buceros rhinoceros</i>	Bucerotidae
	Margin	R: Wreathed Hornbill, <i>Rhyticeros undulates</i>	Bucerotidae

Vol. 68(3)

2019 April 24 (Hummingbirds) (MS/4 & SS/1)**A Z**

a	800fr	Rufous Hummingbird, <i>Selasphorus rufus</i>	Trochilidae
b	800fr	White-necked Jacobin, <i>Florisuga mellivora</i>	Trochilidae
c	800fr	Broad-tailed Hummingbird, <i>Selasphorus platycercus</i>	Trochilidae
d	800fr	Broad-billed Hummingbird, <i>Cynanthus latirostris</i>	Trochilidae
N/A	SS 3300fr	Crowned Woodnymph, <i>Thalurania colombica</i> ssp. <i>fannyi</i>	Trochilidae
	Margin	R: Velvet-purple Coronet, <i>Boissonneaua jardini</i>	Trochilidae

2019 April 24 (Rare Birds) (MS/4 & SS/1)**A Z**

a	800fr	Red-crowned Crane, <i>Grus japonensis</i>	Gruidae
b	800fr	Great Curassow, <i>Crax rubra</i>	Cracidae
c	800fr	Andean Cock-of-the-Rock, <i>Rupicola peruvianus</i>	Cotingidae
d	800fr	Christmas Island Frigatebird, <i>Fregata andrewsi</i>	Fregatidae
N/A	SS 3300fr	Turquoise-browed Motmot, <i>Eumomota superciliosa</i>	Momotidae
	Margin	Ctr: Red-crowned Crane, <i>Grus japonensis</i>	Gruidae
		R: Long-tailed Widowbird, <i>Euplectes progne</i>	Ploceidae

2019 April 24 (Sea Birds) (MS/4 & SS/1)**A Z**

a	800fr	Chinstrap Penguin, <i>Pygoscelis antarcticus</i>	Spheniscidae
b	800fr	Magnificent Frigatebird, <i>Fregata magnificens</i>	Fregatidae
c	800fr	Ring-billed Gull, <i>Larus delawarensis</i>	Laridae
d	800fr	Crested Auklet, <i>Aethia cristatella</i>	Alcidae
N/A	SS 3300fr	Blue-footed Booby, <i>Sula nebouxii</i>	Sulidae
	Margin	R: Black Skimmer, <i>Rynchops niger</i>	Laridae

2019 April 24 (210th anniv. Charles Darwin) (MS/4)**B**

b	800fr	<i>Archaeopteryx lithographica</i>	Archaeopterygidae
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NIGER (continued)		2019 April 24 (Cruise Ships) (MS/4 & SS/1)	B
a	800fr	Red-billed Tropicbird, <i>Phaethon aethereus</i>	Phaethontidae
b	800fr	Brown Booby, <i>Sula leucogaster</i>	Sulidae
c	800fr	Herring Gull, <i>Larus argentatus</i>	Laridae
N/A	SS Margin	UL: European Herring Gull, <i>Larus argentatus</i>	Laridae
		2019 April 24 (Antarctica) (MS/4 & SS/1)	A Z
a	800fr	Southern Giant-Petrel, <i>Macronektes giganteus</i>	Procellariidae
b	800fr	Wandering Albatross, <i>Diomedea exulans</i>	Diomedidae
c	800fr	Adelie Penguin, <i>Pygoscelis adeliae</i>	Spheniscidae
N/A	SS 3300fr	Emperor Penguin, <i>Aptenodytes forsteri</i>	Spheniscidae
		2019 April 24 (Owls) (MS/4 & SS/1)	A Z
a	800fr	Burrowing Owl, <i>Athene cunicularia</i>	Strigidae
b	800fr	Great Gray Owl, <i>Strix nebulosa</i>	Strigidae
c	800fr	Snowy Owl, <i>Bubo scandiacus</i>	Strigidae
d	800fr	Eurasian Eagle-Owl, <i>Bubo bubo</i>	Strigidae
N/A	SS 3300fr	Eurasian Eagle-Owl, <i>Bubo bubo</i>	Strigidae
	Margin	R: Great Gray Owl, <i>Strix nebulosa</i>	Strigidae
		2019 August 24 (Ducks) (MS/4 & SS/1)	A Z
a	800fr	Bufflehead, <i>Bucephala albeola</i>	Anatidae
b	800fr	Mallard, <i>Anas platyrhynchos</i>	Anatidae
c	800fr	Mandarin Duck, <i>Aix galericulata</i>	Anatidae
d	800fr	Muscovy Duck, <i>Cairina moschata</i>	Anatidae
N/A	SS 3300fr	Ringed Teal, <i>Callonetta leucophrys</i>	Anatidae
	Margin	R: Wood Duck, <i>Aix sponsa</i>	Anatidae
		2019 August 24 (Bee-eaters) (MS/4 & SS/1)	A Z
a	800fr	European Bee-eater, <i>Merops apiaster</i>	Meropidae
b	800fr	Green Bee-eater, <i>Merops orientalis</i>	Meropidae
c	800fr	Boehm's Bee-eater, <i>Merops boehmi</i>	Meropidae
d	800fr	Southern Carmine Bee-eater, <i>Merops nubicoides</i>	Meropidae
N/A	SS 3300fr	Blue-tailed Bee-eater, <i>Merops philippinus</i>	Meropidae
	Margin	R: European Bee-eater, <i>Merops apiaster</i>	Meropidae
		2019 August 24 (Pigeons) (MS/4 & SS/1)	A Z
a	800fr	Nicobar Pigeon, <i>Caloenas nicobarica</i>	Columbidae
b	800fr	Rock Pigeon, <i>Columba livia</i>	Columbidae
c	800fr	Pink-backed Pigeon, <i>Treron vernans</i>	Columbidae
d	800fr	Common Wood-Pigeon, <i>Columba palumbus</i>	Columbidae
N/A	SS 3300fr	Mourning Dove, <i>Zenaida macroura</i>	Columbidae
	Margin	LL & UR: New Zealand Pigeon, <i>Hemiphaga novaeseelandiae</i>	Columbidae
		2019 August 24 (Owls) (MS/4 & SS/1)	A Z
a	800fr	Lesser Sooty-Owl, <i>Tyto multipunctata</i> (now lumped w/ Greater Sooty Owl, <i>Tyto tenebricosa</i>)	Tytonidae
b	800fr	Boreal Owl, <i>Aegolius funereus</i>	Strigidae
c	800fr	Barn Owl, <i>Tyto alba</i>	Tytonidae
d	800fr	Spotted Eagle-Owl, <i>Bubo africanus</i>	Strigidae
N/A	SS 3300fr	Eurasian Eagle-Owl, <i>Bubo bubo</i>	Strigidae
	Margin	R: Northern Saw-whet Owl, <i>Aegolius acadicus</i>	Strigidae

NIGER (continued)		2019 November 4 (Hummingbirds) (MS/4 & SS/1)		A Z
a	800fr	Ruby-throated Hummingbird, <i>Archilochus colubris</i>	Trochilidae	
b	800fr	Rufous Hummingbird, <i>Selasphorus rufus</i>	Trochilidae	
c	800fr	Anna's Hummingbird, <i>Calypte anna</i>	Trochilidae	
d	800fr	Black-chinned Hummingbird, <i>Archilochus alexandri</i>	Trochilidae	
N/A	SS 3300fr	Broad-tailed Hummingbird, <i>Selasphorus platycercus</i>	Trochilidae	
	Margin	R: Allen's Hummingbird, <i>Selasphorus sasin</i>	Trochilidae	
		2019 November 4 (Birds of Prey) (MS/4 & SS/1)		A Z
a	800fr	Mountain Caracara, <i>Phalcooboenus megalopterus</i>	Falconidae	
b	800fr	Black Kite, <i>Milvus migrans</i>	Accipitridae	
c	800fr	Ferruginous Hawk, <i>Buteo regalis</i>	Accipitridae	
d	800fr	Osprey, <i>Pandion haliaetus</i>	Pandionidae	
N/A	SS 3300fr	Bald Eagle, <i>Haliaeetus leucocephalus</i>	Accipitridae	
	Margin	Crested Goshawk, <i>Accipiter trivirgatus</i>	Accipitridae	
		2019 November 4 (Parrots) (MS/4 & SS/1)		A Z
a	800fr	Blue-and-yellow Macaw, <i>Ara ararauna</i>	Psittacidae	
b	800fr	White Cockatoo, <i>Cacatua alba</i>	Cacatuidae	
c	800fr	Turquoise-fronted Parrot, <i>Amazona aestiva</i>	Psittacidae	
d	800fr	Pink Cockatoo, <i>Lophochroa leadbeateri</i>	Cacatuidae	
	Margin	UR: U/I parrot		
N/A	SS 3300fr	Red-and-green Macaw, <i>Ara chloropterus</i>	Psittacidae	
	Margin	Hyacinth Macaw, <i>Anodorhynchus hyacinthinus</i>	Psittacidae	
ROMANIA		2018 September 14 (Masters of Camouflage) (Set/4 & MS)		A
This is an update to the listing in Vol. 68(3), p. 204, regarding the absence of four mirror image stamps.				
6174	2l	Eurasian Thick-knee, <i>Burhinus oediconemus</i> (facing R)	Burhinidae	
6174a	2l	Same species (facing L)	Burhinidae	
6174b		MS/5+1 label (4ea Sc#6174 & 1ea Sc#6174a)		
6175	3l	Syrian Woodpecker, <i>Dendrocopos syriacus</i> (facing R)	Picidae	
6175a	3l	Same species (facing L)	Picidae	
6175b		MS/5+1 label (4ea Sc#6175 & 1ea Sc#6175a)		
6176	5l	Eurasian Nightjar, <i>Caprimulgus europaeus</i> (facing R)	Caprimulgidae	
6176a	5l	Same species (facing L)	Caprimulgidae	
6176b		MS/5+1 label (4ea Sc#6176 & 1ea Sc#6176a)		
6177	19l	Eurasian Green Woodpecker, <i>Picus viridis</i> (facing R)	Picidae	
6177a	19l	Same species (facing L)	Picidae	
6177b		MS/5+1 label (4ea Sc#6177 & 1ea Sc#6177a)		
		2019 April 12 (Europa: National Birds) (Set/2 & 2ea SS/4)		A
6251	1,80l	Eurasian Skylark, <i>Alauda arvensis</i>	Alaudidae	
6251a		MS/6 (Sc#6251)		
6252	19l	Golden Eagle, <i>Aquila chrysaetos</i>	Accipitridae	
6252a		MS/6 (Sc#6252)		
6252b		SS/4 (2ea Sc#6251–52) (Sc#6251 at UL)		
6252c		SS/4 (2ea Sc#6251–52) (Sc#6252 at UL)		
		2019 April 25 (Protected Animals) (Set/6 & MS/5)		A
6258	1.60l	Black Grouse, <i>Lyrurus tetrix</i>	Phasianidae	
6258a		MS/5+1 label (Sc#6258)		
6262	7l	Eurasian Capercaillie, <i>Tetrao urogallus</i>	Phasianidae	
6262a		MS/5+1 label (Sc#6262)		

ROMANIA**2019 May 17** (Peafowl) (Set/4 & MS)**A**

A set of four stamps of peafowl, as currently listed by Scott Publishing, but each stamp has a mirror image that Scott did not list. This also happened with the 14 September 2018 issue (Masters of Camouflage) (see Vol. 68(3), p. 204). I emailed the New Issues Editor at Scott Publishing to make them aware of this, and they will check on the other four from their supplier and issue an update in a future issue. Images on eBay show the configuration and this listing below reflects the anticipated numbers.

6273	1.80L	Congo Peafowl, <i>Afropavo congensis</i> (facing L)	Phasianidae
[6273a]	1.80L	Same species (facing R)	Phasianidae
[6273b]		MS/5+1 label (4ea Sc#6273 & 1ea Sc#6273a)	
6274	5L	Green Peafowl, <i>Pavo muticus</i> (facing R)	Phasianidae
[6274a]	5L	Same species (facing L)	Phasianidae
[6274b]		MS/5+1 label (4ea Sc#6274 & 1ea Sc#6274a)	
6275	8.50L	Indian Peafowl, <i>Pavo cristatus</i> (facing R)	Phasianidae
[6275a]	8.50L	Same species (facing L)	Phasianidae
[6275b]		MS/5+1 label (4ea Sc#6275 & 1ea Sc#6275a)	
6276	12L	Indian Peafowl, <i>Pavo cristatus</i> (facing L)	Phasianidae
[6276a]	12L	Same species (facing R)	Phasianidae
[6276b]		MS/5+1 label (4ea Sc#6276 & 1ea Sc#6276a)	

ST. MARTIN**2019 June 24** (Birds) (MS/10+10 labels)**A**

The labels feature each of the ten birds in different poses.

189a	190c	Black-and-white Warbler, <i>Mniotilta varia</i>	Parulidae
189b	190c	Blue-winged Teal, <i>Anas discors</i> (Cap: <i>Spatula discors</i>)	Anatidae
189c	190c	Willet, <i>Tringa semipalmata</i>	Charadriidae
189d	190c	Osprey, <i>Pandion haliaetus</i>	Pandionidae
189e	190c	Antillean Crested Hummingbird, <i>Orthorhyncus cristatus</i>	Trochilidae
189f	190c	Red-footed Booby, <i>Sula sula</i>	Sulidae
189g	190c	Snowy Egret, <i>Egretta thula</i>	Ardeidae
189h	190c	Northern Parula, <i>Setophaga americana</i>	Parulidae
189i	190c	American Kestrel, <i>Falco sparverius</i>	Falconidae
189j	190c	Semipalmated Plover, <i>Charadrius semipalmatus</i>	Charadriidae

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

857	69d	Wallcreeper, <i>Tichodroma muraria</i>	Tichodromidae
858	100d	Squacco Heron, <i>Ardeola ralloides</i>	Ardeidae

S. GEORGIA & S. SANDWICH IS. **2019 September 20** (Habitat Restoration) (Set/6)**A**

607	55p	South Georgia Pipit, <i>Anthus antarcticus</i>	Motacillidae
609	70p	White-chinned Petrel, <i>Procellaria aequinoctialis</i>	Procellariidae
610	£1.05	Wilson's Storm-Petrel, <i>Oceanites oceanicus</i>	Oceanitidae
611	£1.25	Yellow-billed Pintail, <i>Anas Georgia</i>	Anatidae

SURINAME**2019 April 10** (Owls) (Block/12)**A**

Only three species of the Tytonidae family have yet to appear on a stamp: Seram Masked Owl, Manus Masked Owl, and Andaman Masked-Owl.

1561a	(\$1.50)	Lesser Moluccan Masked-Owl, <i>Tyto sororcula</i> (inscr. "C") (Cap: <i>Tyto almae</i> , a ssp. recently elevated to full species status)	Tytonidae	
1561b	\$4.50	Golden Masked-Owl, <i>Tyto aurantia</i> (Previously named New Britain Masked-Owl. Listed as new in Vol. 68(2), but it appeared on an unlisted Mozambique issue of 25 November 2013.)	Tytonidae	Vol. 63(2)
1561c	\$6	African Grass-Owl, <i>Tyto capensis</i>	Tytonidae	
1561d	\$7	Ashy-faced Owl, <i>Tyto glaucops</i>	Tytonidae	

NEW BIRDS IN THE PHILATELIC AVIARY

Charles E. Braun, BU1364

New Birds



TROPICAL SHEARWATER, *Puffinus bailloni* Procellariidae
Cook Islands, 2018 May 4, Sc#1594b, \$4.80

Length: 11 to 13 inches, sexes alike, marine. Blackish above and white below with pink legs.

Habitat: Marine offshore. Breeds on oceanic islands,

Range: Mascarene Islands, Indian Ocean.

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

NEW ZEALAND STORM-PETREL, *Fregatta maoriana* Oceanitidae
Sierra Leone, 2016 December 29, Sc#4056c, 6000le

Length: 7 inches, sexes alike, marine and pelagic. Brownish gray above and white below with a dark breast band and white supercilium.

Habitat: Marine and pelagic away from land. Breeds on isolated islands.

Range: New Zealand area.

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



†**MAURITIUS RED RAIL *Aphanapteryx bonasia*** Rallidae
Sierra Leone, 2018 February 27, Sc#4670b, 9800le

Length: 25 inches, sexes alike, resident. Reddish with hair-like feathers. Extinct in the late 17th century.

Habitat: Wetlands.

Range: Mauritius.

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

RED-BREASTED DOTTEREL, *Charadrius obscurus* Charadriidae
New Zealand, 2017 August 2, Sc#2742, \$3.30

Length: 10 to 11 inches, sexes alike, resident. Brown above and white below with an orange-buff breast and white superciliary.

Habitat: Breeds inland, otherwise coastal.

Range: New Zealand.

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



RUDDY QUAIL-DOVE, *Geotrygon montana* Columbidae
Guinea, 2019 November 16, not yet cataloged, SS 50000fr

Length: 9 to 11 inches, resident. Chestnut above and purple-pink below with a buff belly, fawn stripe below the eye and rose or purplish red around the eye. The female is olive-brown above.

Habitat: Lowland humid forest.

Range: West Indies and Mexico to northeastern Argentina.

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



LESSER MASKED OWL, *Tyto sororcula* Tytonidae
Suriname, 2019 April 10, Sc#1561a, (\$1.50) (inscr. "C")

Length: 12 inches, sexes alike, resident. Mottled brownish above and dark-spotted whitish below with pale legs.

Habitat: Forest.

Range: Seram, Buru, Larat, and Yamdena islands, Indonesia.

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



SNOWY-BELLIED HUMMINGBIRD, *Amazilia edward* Trochilidae
Central African Republic, 2019 October 21, not yet cataloged, 900fr

Length: 3 to 4 inches, sexes similar, resident. Bronze-green to coppery above and white below with a golden green head and breast.

Habitat: Open and semi-open areas.

Range: Southwestern Costa Rica and Panama.

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

TALAMANCA HUMMINGBIRD, *Eugenes spectabilis* Trochilidae
Central African Republic, 2019 October 21, not yet cataloged, 900fr

Length: 4 to 5 inches, resident. The male (shown) is green with an iridescent purple crown, a white spot behind the eye and a pale green breast band. The female is grayish below and lacks the purple crown.

Habitat: Humid cloud-forest and open areas.

Range: Costa Rica and western Panama.

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



CARNABY'S BLACK- COCKATOO, *Calyptorhynchus latirostris* Cacatuidae
Suriname, 2019 October 9, not yet cataloged, \$14

Length: 22 to 24 inches, sexes similar, resident. Dusky black with off-white ear patches and a white central tail.

Habitat: Heath, shrubs, and eucalypt woods.

Range: Southwestern Australia.

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



YELLOW-TAILED BLACK-COCKATOO, *Calyptorhynchus funereus* Cacatuidae
Suriname, 2019 October 9, not yet cataloged, \$11

Length: 22 to 24 inches, resident. The male (shown) is dusky black with yellow ear patches, a yellow central tail and a dark bill. The female has a bone-colored bill.

Habitat: Coastal heath, woodland, forest, and plantations.

Range: Southeastern Australia.

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



VISAYAN BROADBILL, *Eurylaimus samarensis* Eurylaimidae
Philippines, 2019 November 11, not yet cataloged, 25p

Length: 6 inches, resident. The male (shown) is purple above and lilac below with a purple crown, black wings and blue around the eyes. The female is white below.

Habitat: Primary forest.

Range, Samar, Leyte, and Bohol islands, Philippines.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 8*.

ROTE MYZOMELA, *Myzomela irianawidodoae* Meliphagidae
Indonesia, 2019 November 5, not yet cataloged, 3000r

Length: 4 inches, resident. The male (shown) is black above and ashy gray below with a dark red hood and rump and a dark breast. The female is gray-brown above and pale gray below.

Habitat: Forest and forest edges.

Range: Rote Island, Indonesia.

Reference: Prawiradilaga, D. M., P. Baveja, and F. Rheindt. 2017.



LESSER RACKET-TAILED DRONGO, *Dicrurus remifer* Dicruridae
Togo, 2019 November 5, not yet cataloged, SS 3300fr (Bot margin)

Length: 10 inches plus a 6-inch tail, sexes alike, resident. All glossy black.

Habitat: Forest, clearings, and open woodlands.

Range: Northern India to Vietnam and Java.

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



ASHY DRONGO, *Dicrurus leucophaeus* Dicruridae
Togo, 2019 November 5, not yet cataloged, 800fr & SS 3300fr

Length: 10 to 12 inches, sexes similar, migratory. Gray, paler below with a forked tail.

Habitat: Highland forest.

Range: Breeds from the Himalayas and northern China to the Philippines, Sumatra, and Borneo. Winters from India and southern China to the Philippines, Sumatra, and Borneo.

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



CHESTNUT-FACED BABBLER, *Zosterornis whiteheadi* Zosteropidae
Philippines, 2019 November 11, not yet cataloged, MS 25p (L margin)

Length: 6 inches, sexes similar, resident. Grayish brown above and yellow below with a dull chestnut face and a pale gray crown.

Habitat: Montane forest and scrub.

Range: Luzon, Philippines.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 12*.





CHESTNUT-TAILED STARLING, *Sturnia malabarica* Sturnidae
Togo, 2019 August 30, not yet cataloged, 800fr

Length: 8 inches, sexes alike, resident. Silver-gray above and cinnamon-brown or whitish below with a pale streaky head and neck.

Habitat: Open areas and plantations.

Range: India to southern China and Vietnam.

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



BLACK-BREASTED WEAVER, *Ploceus benghalensis* Ploceidae
Togo, 2019 August 30, not yet cataloged, 800fr

Length: 6 inches, resident. The male (shown) is dark brown above and creamy below with a golden-yellow crown and a gray-brown throat. The female is dark-streaked gray-brown above and creamy below with a light brown breast and yellow neck patch.

Habitat: Grassy areas.

Range: Eastern Pakistan to Bangladesh.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 15*.



TAVETA GOLDEN WEAVER, *Ploceus castaneiceps* Ploceidae
Togo, 2019 August 30, not yet cataloged, SS 3300fr

Length: 6 inches, resident. The male (shown) is olive-yellow above and golden-yellow below with a yellow-orange crown and a chestnut-orange collar. The female is greenish above and off-white below with a pale yellow breast.

Habitat: Breeds in swampy lowlands, otherwise in drier bush country.

Range: South-central Kenya and northeastern Tanzania,

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

LAVENDER WAXBILL, *Estrilda caerulescens* Estrildidae
Togo, 2019 August 30, not yet cataloged, SS 3300fr

Length: 4 inches, sexes similar, resident. Pearly gray with a black eye streak and a red rump and upper tail.

Habitat: Thickets and thicket edges.

Range: Senegal to the Central African Republic.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 15*.



BLACK-HEADED WAXBILL, *Estrilda atricapilla* Estrildidae
Togo, 2019 August 30, not yet cataloged, 800fr (previously on a Staffa local)

Length: 4 inches, sexes similar, resident. Black-barred grayish above and gray below with a black crown and nape and red flanks and rump.

Habitat: Grassy areas.

Range: Southern Cameroon to northeastern Angola.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 15*.



CAPE SPARROW, *Passer melanurus* Passeridae
Togo, 2019 November 5, not yet cataloged, SS 3300fr (LL margin)

Length: 6 inches, resident. The male (shown) is chestnut above and white below with a white-bordered black face, black crown, and black throat. The female has a gray crown, face, and throat.

Habitat: Semi-arid savanna and light woodland.

Range: Southwestern Angola to South Africa.

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



BLANFORD'S SNOWFINCH, *Montifringilla blanfordi* Passeridae
Togo, 2019 November 5, not yet cataloged, SS 3300fr (R)

Length: 6 inches, sexes alike, resident. Sandy brown above and white below with a patterned black-and-white face.

Habitat: Sandy plains and grassy steppes.

Range: Northern Nepal and Sikkim to northern China.

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

the World, Volume 16.

MACGILLIVRAY'S WARBLER, *Geothlypis tolmei* Parulidae

Mozambique, 2019 August 16, not yet cataloged, 116m

Length: 5 inches, migratory. The male (shown) is olive-green above and yellow below with a gray hood and white eye crescents. The female has a paler hood and a pale throat.

Habitat: Breeds in areas with a dense understory. Winters in dense scrub.

Range: Breeds from southeastern Alaska to central California. Winters from western Mexico to Panama.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 15.*



YELLOW-HOODED BLACKBIRD, *Chrysomus icterocephalus* ssp. *icterocephalus* Icteridae

Suriname, 2019 December 27, not yet cataloged, \$5

Length: 7 inches, sexes alike, resident. The subspecies shown is black with a yellow hood and black lores. The female is olive with a yellow throat and supercilium.

Habitat: Marshes, humid savannas, and mangroves.

Range: Along the Amazon from northeastern Peru and the South American coast north to Colombia.

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

GREAT ROSEFINCH, *Carpodacus rubicilla* Fringillidae\

Azerbaijan, 2019 September 19, not yet cataloged, 0.5m

Length: 8 inches, resident. The male (shown) is red with a blackish brown back and wings. The female is dark-streaked gray-brown above and olive-streaked buff below.

Habitat: Sparsely vegetated alpine and subalpine areas.

Range Southwestern Russia to west-central China and northern Pakistan.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. *Handbook of the Birds of the World, Volume 15.*



TURQUOISE DACNIS, *Dacnis hartlaubi* Thraupidae
Colombia, 2018 August 27, Sc#1475a, 1000p

Length: 4 inches, resident. The male (shown) is turquoise-blue with a black eye stripe, back, wings, and tail. The female is dull brown above and grayish-buff below with a yellowish belly.

Habitat: Humid regions with heavy rainfall.

Range: Western and central Colombia.

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



RARE ALBATROSS ON NEW SHEET

On 2 January 2020, the French Southern and Antarctic Territories (FSAT) issued a souvenir sheet containing one 110×87 mm stamp depicting a pair of Amsterdam Albatrosses (*Diomedea amsterdamensis*). This huge bird only breeds on Amsterdam Island in the southern Indian Ocean. It was first described in 1983, and was thought by some researchers to be a sub-species of the wandering albatross (*D. exulans*). DNA testing has revealed that it is indeed a separate species.

Although its breeding ground is well known, it is uncertain where it spends the rest of the year. Some possible sightings have been noted in Australia and New Zealand. Like all albatrosses it likely covers large areas as it travels. Because of its rarity (estimated at 130 birds), it is listed as critically endangered by the International Union for Conservation of Nature.

The bird weighs 4.8 to 8 kg (11–18 lb) and is 107 to 122 cm (42–48 in) long with a wingspan of 280 to 340 cm (110–130 in). The adult bird has chocolate brown upper parts and is white on its face mask, throat, lower breast, and belly. It has a broad brown breast band along with brown undertail coverts. Its pink bill has a dark tip and dark cutting edges, and its underwings are white except for the dark tip and the dark leading edge.

The Amsterdam Albatross has been depicted on six previous issues, all by FSAT, starting with a set of four wildlife stamps in 1985.

The sheet is captioned in French, “Lords of the Southern Seas, the pairs of great albatross faithful for life, find themselves after having spent a year crossing the ocean.” It was designed by Nadia Charles and printed by offset.





ICHTHYOLOGY

Editor

J. Dale Shively, BU1832

New Listings



Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
AUSTRALIA 2019 October 22 (Items Starting w/ Same Letter) (SS/6 & Bklt/10)				
5028	\$1	Stylized fish in creel & on shirt (w/ father, fishing pole, child) (perf 14¾×14)		S B
5032a		SS/6 (Sc#5027–32)		
5034	\$1	Like Sc#5028 (die cut 11¼ syncopated) (s/a)		
5034a		Bklt/10 (Sc#5034)		
CROATIA 2019 September 27 (Special Police Unit Emblems) (MS/21+4 labels)				
Note: The listing in the <i>Scott New Issues</i> supplement erroneously skips the minor letter “o” so all the succeeding letters are off by one. This list uses the correct designations.				
1142c	3.60k	Stylized shark on outside emblem border (Ajkule Unit)		S B
1142r	3.60k	Stylized fish in heron's talon (Simini Andeli Pakla Unit)		S B
CUBA 2018 May 15 (Marine Life) (Set/6 & SS/1)				
6057	10c	no common name, <i>Abyssobrotula galathea</i>	Ophidiidae	S A
6058	20c	Common Fangtooth, <i>Anoplogaster cornuta</i>	Anoplogasteridae	S A
6059	45c	Caribbean Roughshark, <i>Oxynotus caribbaeus</i>	Oxynotidae	S A
6061	90c	Blue Parrotfish, <i>Scarus coeruleus</i>	Scaridae	S A
6062	1.05p	Tarpon, <i>Megalops atlanticus</i>	Megalopidae	S A
6063	SS 1p	Yellow Goatfish, <i>Mulloidichthys martinicus</i> (imperf)	Mullidae	S A
CZECH REPUBLIC 2019 September 4 (Animals in Czech Republic Zoos) (SS/4+4 labels)				
3802	Margin	LL: Koi (Common Carp), <i>Cyprinus carpio</i>	Cyprinidae	Z
		Bot: Kapas (Goldfish), <i>Carassius auratus</i>	Cyprinidae	Z
DJIBOUTI 2019 June 12 (Fish & Coral) (MS/4 & SS/1)				
1728a	250fr	Blue Tang, <i>Paracanthurus hepatus</i>	Acanthuridae	A
1728b	250fr	Yellowface Angelfish, <i>Pomacanthus xanthonetopon</i>	Pomacanthidae	A
1728c	250fr	Emperor Angelfish, <i>Pomacanthus imperator</i>	Pomacanthidae	A
1728d	250fr	Clown Triggerfish, <i>Balistoides conspicillum</i>	Balistidae	A
1728	Margin	Bkgrd: Reef fish, <i>Anthias</i> sp.(?)		U Z
1738	SS 1000fr	Indian Sail-Fin Surgeonfish, <i>Zebbrasoma desjardini</i>	Acanthuridae	A
	Margin	UL: Bluering Angelfish, <i>Pomacanthus annularis</i>	Pomacanthidae	Z
		MR: Regal Angelfish, <i>Pygoplites diacanthus</i>	Pomacentridae	Z
		UR: Lionfish sp.	Scorpaenidae	U Z
		LR: Pennant Coralfish, <i>Heniochus acuminatus</i>	Chaetodontidae	Z
2019 July 27 (Turtles) (SS/1)				
1809	SS/1	L: U/I Goby sp.	Gobiidae	U Z
		LL: U/I reef fish		U Z
		UR: Pennant Coralfish, <i>Heniochus acuminatus</i>	Chaetodontidae	Z
2019 August 27 (Scouts) (MS/4 & SS/1)				
1844a	250fr	Stylized fish (w/ child fishing)		S B
1854	SS Margin	Stylized fish (in river)		S Z

FINLAND		2019 January 23 (Ice Fishing & Swimming in Ice Water) (Horiz. Pair)		
1578a	(€1.50)	U/I fish (laying on ice w/ ice anglers)		U C
1578		Horiz Pair (Sc#1578a–b)		
		2019 June 5 (Coils) (Strip/5)		
1592	(€1.50)	European perch, <i>Perca fluviatilis</i>	Percidae	A
1592a		Coil Strip/5 (Sc#1590–94)		
FRANCE		2019 June 6 (<i>Astérix</i> Comic Strip Characters) (Bklt/12)		
5664	(88c)	Stylized fish (w/ Ordralfastérix)		S B
5672a		Bklt/12 (Sc#5661–72)		
FRENCH POLYNESIA		2019 (Office of Posts & Telecommunications Emblem) (Bklt/10)		
1229	(80fr)	Stylized fish		S
1229a		Bklt/10 (Sc#1229)		
GREAT BRITAIN		2019 September 3 (Albums by Elton John) (Horiz Strip/4 & SS/8)		
3879	(70p)	Stylized fish (<i>Captain Fantastic and the Brown Dirt Cowboy</i> album) (perf 14¼×14)		S C
3879a		Horiz strip/4 (Sc#3876–79)		
3883b		SS/8 (Sc#3876–83)		
3886	(70p)	Stylized fish (<i>Captain Fantastic and the Brown Dirt Cowboy</i> album) (die cut 14¼×14)		S C
3886a		Bklt/6 (Sc#3885–86 & 4ea Sc#MH426)		
GREAT BRITAIN (Guernsey)		2019 October 1 (50th anniv. Philatelic Independence) (Set/6)		
Note: <i>Scott New Issues</i> supplement erroneously lists the s-o-s as Sc#703, a stamp w/ a child's drawing of space.				
1515	80p	Guernsey stamp Sc#663(£5), stylized fish in frame		S B
GREAT BRITAIN (Isle of Man)		2018 October 29 (Christmas Type of 2018) (MS/8)		
1994	Margin	Top: Stylized shark in cartoon frame		S Z
NEW ZEALAND		2019 June 5 (Legend of Kupe, the Great Navigator) (Block/8 & MS/8)		
2868c	\$1.30	Stylized fish (sharks?) (w/ whale)		S C
2868		Block/8 (Sc#2868a–h)		
2868i		MS/8 (Sc#2868a–h)		
		2019 October 2 (Paintings by Michel Tuffery) (SS/5)		
2887	\$4	Stylized fish (w/ Captain James Cook)		S B
2887a		SS/5 (Sc#2883–87)		
TRISTAN DA CUNHA		2019 October 1 (Children's Art) (Set/4)		
1162	70p	Stylized fish ("Fishing off Tristan Island," by Calvin Green)		S B
UNITED NATIONS		2019 September 23 (Climate Change) (Set/2)		
1225	\$1.15	Orange Clownfish, <i>Amphiprion percula</i>	Pomacanthidae	B
UNITED NATIONS (Vienna)		2019 September 23 (Climate Change) (SS/1)		
651	SS €1.80	U/I fish (w/ corals)		U B
VANUATU		2019 October 9 (Campaign Against Plastic Pollution) (Set/4)		
1109	180v	U/I reef fish (w/ diver photographing marine life)		U C
1111	350v	UL: Moorish Idol, <i>Zanclus cornutus</i> (w/ children swimming)	Zanclidae	C
		LR: Sergeant-major (?), <i>Abudefduf saxatilis</i>	Pomacentridae	C
		LL: Threadfin Butterflyfish, <i>Chaetodon auriga</i>	Chaetodontidae	C



ENTOMOLOGY

Editor

Donald P. Wright, Jr., BU243
and José Reis, BU1889



New Listings

Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
ANGOLA 2019 December 20 (Butterflies) (MS/4 & SS/1) (ANG190208a&b)				
a	300k	Golden Pansy, <i>Junonia sophia</i> Fabr.	NYM, Nymphalinae	A
b	300k	Giant Blue Swallowtail, <i>Papilio zalmoxis</i> Hewitson	PAP, Papilioninae	A
c	300k	Angolan White Lady, <i>Graphium angolanus</i> Goeze	PAP, Papilioninae	A
d	300k	African Giant Swallowtail, <i>Papilio antimachus</i> Drury	PAP, Papilioninae	A
N/A	SS 1200k	Common Grass Yellow, <i>Eurema hecabe</i> L.	PIE, Coliadinae	A
	Margin	LL: Giant Blue Swallowtail, <i>Papilio zalmoxis</i> Hewitson	PAP, Papilioninae	Z
		UR & LR: African Monarch, <i>Danaus chrysippus</i> L.	NYM, Danainae	Z
BANGLADESH 2018 September 1 (18th Asian Art Biennale) (Single)				
894	10t	Stylized Butterfly	Lepidoptera	S A
BELGIUM 2020				
N/A	(€1.21)	Monarch, <i>Danaus plexippus</i> L. (Priority rate)	NYM, Danainae	B
BRITISH INDIAN OCEAN TERR. 2019 December 4 (Dragonflies) (Set/6)				
N/A	60p	Coastal Glider, <i>Macrodiplax cora</i> Kaup	LIB, Urothemistinae	A
N/A	60p	Little Blue Darter, <i>Diplacodes trivialis</i> Rambur	LIB, Sympetrinae	A
N/A	£1	Pygmy Dartlet, <i>Agriocnemis pygmaea</i> Rambur	COE, Agriocnemidinae	A
N/A	£2	Vagrant Emperor, <i>Anax ephippiger</i> Burmeister	AES, Aeshninae	A
N/A	£2	Okinawan Dragonfly, <i>Rhyothemis variegata</i> L.	LIB, Trameinae	A
N/A	£3	Phantom Darner, <i>Anax guttatus</i> Burmeister	AES, Aeshninae	A
CANADA 2020 January 17 (Year of the Rat) (Single & SS/2)				
N/A	(92c)	Stylized Butterflies (in rat daughter's headdress)	Lepidoptera	C
a	SS (\$2.71)	Stylized Butterflies (in rat daughter's headdress)	Lepidoptera	C
	Margin	UR: Stylized Butterflies (in rat daughter's headdress)	Lepidoptera	C Z
CYPRUS 2020 February 12 (Butterflies of Cyprus) (Set/3)				
N/A	34c	Black-veined White, <i>Aporia crataegi</i> L.	PIE, Pierinae	A
N/A	41c	Old World Swallowtail, <i>Papilio machaon</i> L. ♀	PAP, Papilioninae	A
N/A	64c	Levantine Leopard, <i>Cigaritis acamas</i> ssp. <i>cyprica</i> Riley	LYC, Theclinae	A
DJIBOUTI 2019 July 27 (Butterflies) (MS/4 & SS/1) (DJB190412a&b)				
1796a	250fr	Soldier, <i>Danaus eresimus</i> Cramer	NYM, Danainae	A
1796b	250fr	Cleopatra, <i>Gonepteryx cleopatra</i> L.	PIE, Coliadinae	A
1796c	250fr	Blue Triangle, <i>Graphium sarpedon</i> L.	PAP, Papilioninae	A
1796d	250fr	Forest Giant Owl, <i>Caligo eurilochus</i> Cramer	NYM, Morphinae	A
	Margin	Bkgrd: Peacock, <i>Nymphalis io</i> L.	NYM, Nymphalinae	Z
1808	SS 1000fr	Peacock, <i>Nymphalis io</i> L.	NYM, Nymphalinae	A
	Margin	Bkgrd: Blue Triangle, <i>Graphium sarpedon</i> L. (12)	PAP, Papilioninae	Z
		Bkgrd: Cleopatra, <i>Gonepteryx cleopatra</i> L. (4)	PIE, Coliadinae	Z
		LL: Black-veined White, <i>Aporia crataegi</i> L.	PIE, Pierinae	Z

DJIBOUTI (continued)		2019 December 12 (Butterflies) (MS/4 & SS/1) (DJB190607a&b)		
a	250fr	Tiger Butterfly, <i>Tithorea harmonia</i> Cramer	NYM, Danainae	A
b	250fr	Cairns Birdwing, <i>Troides priamus</i> ssp. <i>euphorion</i> Gray	PAP, Papilioninae	A
c	250fr	Western Tiger Swallowtail, <i>Papilio rutulus</i> Lucas	PAP, Papilioninae	A
d	250fr	Blue Wave, <i>Myscelia cyaniris</i> Doubleday	NYM, Biblidinae	A
N/A	SS 1000fr	Large Keeled Apollo, <i>Parnassius tianschanicus</i> Oberthür	PAP, Parnassiinae	A
	Margin	UL: Common Map, <i>Cyrestis thyodamas</i> Boisduval (w/ three chrysalides & a larva)	NYM, Cyrestinae	Z
		UR: Common Jezebel, <i>Delias eucharis</i> Drury	PIE, Coliadinae	Z
		LR: New Guinea Birdwing, <i>Troides priamus</i> L.	PAP, Papilioninae	Z
FINLAND		2020 May 6 (Enchanted Forest) (Set/2)		
N/A	(€1.60)	Stylized “Boreal owl with wings of a Butterfly”	Lepidoptera	S A
FRANCE		2020 January 6 (Butterfly Wing Close-ups) (Bklt/12) (s/a)		
a	(€1.16)	Goliath Birdwing, <i>Troides goliath</i> Oberthür	PAP, Papilioninae	A
b	(€1.16)	Spanish Festoon, <i>Zerynthia rumina</i> L.	PAP, Parnassiinae	A
c	(€1.16)	Knapweed Fritillary, <i>Melitaea phoebe</i> Denis & Schiffermüller	NYM, Nymphalinae	A
d	(€1.16)	Claudia’s Beauty, <i>Agrias claudina</i> Godart	NYM, Charaxinae	A
e	(€1.16)	Brown Morpho, <i>Morpho hecuba</i> L.	NYM, Morphinae	A
f	(€1.16)	Lime Swallowtail, <i>Papilio demoleus</i> L.	PAP, Papilioninae	A
g	(€1.16)	Glorious Begum, <i>Agatasa calydonia</i> Hewitson	NYM, Charaxinae	A
h	(€1.16)	Keeled Apollo, <i>Parnassius nomion</i> Fischer	PAP, Parnassiinae	A
i	(€1.16)	Glorious Begum, <i>Agatasa calydonia</i> Hewitson	NYM, Charaxinae	A
j	(€1.16)	Old World Swallowtail, <i>Papilio machaon</i> L.	PAP, Papilioninae	A
k	(€1.16)	Spanish Moon, <i>Graellsia isabellae</i> Graells	SAT, Saturniinae	A
l	(€1.16)	Common Morpho, <i>Morpho helenor</i> ssp. <i>peleides</i> Kollar	NYM, Morphinae	A
	Bklt Cover	L: Spanish Moon, <i>Graellsia isabellae</i> Graells ♀	SAT, Saturniinae	Z
		ML: Claudia’s Beauty, <i>Agrias claudina</i> Godart	NYM, Charaxinae	Z
		MR: Spanish Festoon, <i>Zerynthia rumina</i> L.	PAP, Parnassiinae	Z
		R: Spanish Moon, <i>Graellsia isabellae</i> Graells ♂	SAT, Saturniinae	Z
THE GAMBIA		2019 November 6		
a	100d	Texas Unicorn Mantis, <i>Phyllovates chlorophaea</i> Blanchard	MAN, Vatinae	A
b	100d	Orchid Mantis, <i>Hymenopus coronatus</i> Olivier	HYM, Hymenopodinae	A
c	100d	<i>Ceratantis saussurii</i> Wood-Mason	HYM, Oxypilinae	A
N/A	SS 250d	<i>Ceratantis saussurii</i> Wood-Mason	HYM, Oxypilinae	A
GRENADA		2020 (Madagascar Wildlife)		
c	\$4	Giraffe Weevil, <i>Trachelophorus giraffa</i> Jekel	ATT, Attelabinae	A
GUYANA		2019 November 6 (Moths)		
a	\$300	Tailed Comet Moth, <i>Actias mittrei</i> Guerin-Méneville	SAT, Saturniinae	A
b	\$400	Cecropia Moth, <i>Hyalophora cecropia</i> L.	SAT, Saturniinae	A
c	\$500	Polyphemus Moth, <i>Antheraea polyphemus</i> Cramer	SAT Saturniinae	A
	\$800	UL: U/I Inchworm	Geometridae	U C
		ML: U/I Caterpillar	Lepidoptera	U C
		LL: Polyphemus Moth, <i>Antheraea polyphemus</i> Cramer	SAT, Saturniinae	B
		Top: U/I Moth	Lepidoptera	U C
		UR: Cecropia Moth, <i>Hyalophora cecropia</i> L.	SAT, Saturniinae	B
		LR: Ailanthus Silk Moth, <i>Samia cynthia</i> Drury	SAT, Saturniinae	B
JAPAN		1989 June 30 (National Treasures) (Set/2) (previously unlisted)		
1817	100¥	Large Green Jewel Beetle, <i>Chalcophora japonica</i> Gory (Horyu Temple—contains 9,000 jewel beetle wings)	BUP, Chrysochroinae	S C

MALTA		2019 November 22 (Apiculture in Malta) (Horiz Strip/5 & MS/10)		
a	30c	Western Honeybee, <i>Apis mellifera</i> L. (w/ white flower-facing R)	API, Apinae	A
b	30c	Same species (w/ yellow flower-facing L)	API, Apinae	A
c	30c	Same species (w/ honeycomb)	API, Apinae	A
d	30c	Same species (w/ yellow flower-facing R)	API, Apinae	A
e	30c	Same species (w/ white flower-facing L)	API, Apinae	A
N/A		MS/10 (2ea #a–e)		
NEW ZEALAND		2020 February 5 (Native Daphne Moths) (MS/6)		
a	\$1.30	West Alpine Daphne Moth, <i>Notoreas blax</i> Prout	GEO, Larentiinae	A
b	\$1.30	Foveaux Daphne Moth, <i>Notoreas casanova</i> Patrick & Hoare	GEO, Larentiinae	A
c	\$1.30	Mason Bay Daphne Moth, <i>Notoreas edwardsi</i> Patrick & Hoare	GEO, Larentiinae	A
d	\$1.30	South Island Alpine Daphne Moth, <i>Notoreas mechanitis</i> Meyrick	GEO, Larentiinae	A
e	\$1.30	Undescribed new species, <i>Notoreas</i> sp. nov. (black & yellow)	GEO, Larentiinae	A
f	\$1.30	Undescribed new species, <i>Notoreas</i> sp. nov. (brown & orange)	GEO, Larentiinae	A
POLAND		2019 September 27 (Children's Art) (SS/3)		
4450c	3.30z	"Bee's Paradise," by Patryk Zielanski	Apidae	S C
SERBIA		2019 (Flowers) (Single)		
N/A	40d	Western Honeybee, <i>Apis mellifera</i> L.	API, Apinae	B
SURINAME		2020 February 5 (Butterflies) (MS/16+4 labels)		
a	F	Imperial Sunstreak, <i>Arcas imperialis</i> Cramer (inscr. "F")	LYC, Theclinae	A
b	\$9	White Tiger, <i>Danaus melanippus</i> Cramer (also on label)	NYM, Danainae	A
c	\$12	Aoede Longwing, <i>Neruda aoede</i> Hübner (also on label)	NYM, Heliconiinae	A
d	\$13	Tiger Longwing, <i>Heliconius hecale</i> Fabr. (also on label)	NYM, Heliconiinae	A
e	\$14	Common Eggfly, <i>Hypolimnas bolina</i> L. (also on label)	NYM, Nymphalinae	A
f	\$15	Yellow Pansy, <i>Junonia hierta</i> Fabr.	NYM, Nymphalinae	A
g	\$16	Blue Morpho, <i>Morpho rhetenor</i> Cramer	NYM, Morphinae	A
h	\$23	Glorious Begum, <i>Agatasa calydonia</i> Hewitson	NYM, Charaxinae	A
TANZANIA		2020 (Sc#2544C surch) (Single)		
N/A	900sh	Blood-red Acraea, <i>Acraea petraea</i> Boisduval ♀	NYM, Heliconiinae	A
URUGUAY		2019 (Flora & Fauna) (Set/4 & MS/8)		
b	25p	Ruddy Daggerwing, <i>Marpesia petreus</i> Cramer	NYM, Cyrestinae	B
c	25p	<i>Xylocopa frontalis</i> Olivier	API, Xylocopinae	B
d	25p	Asian Ladybeetle, <i>Harmonia axyridis</i> Pallas	COC, Epilachninae	B
N/A		MS/8 (2ea #a–d)		

Beyond the Catalog

(Issues of dubious validity)

CENTRAL AFRICAN REPUBLIC		2019 October 21 (Bees) (MS/4 & SS/1) (CA190804a&b)		
a	850fr	Rusty-patched Bumblebee, <i>Bombus affinis</i> Cresson	API, Apinae	A
b	850fr	Blue-banded Bee <i>Amegilla cingulata</i> Fabr.	API, Apinae	A
c	850fr	Little Honeybee, <i>Apis florea</i> Fabr.	API, Apinae	A
d	850fr	Eastern Honeybee, <i>Apis cerana</i> Enderlein	API, Apinae	A
N/A	SS 3300fr	Neon Cuckoo Bee, <i>Thyreus nitidulus</i> Fabr.	API, Xylocopinae	A
	Margin	R: Western Honeybee, <i>Apis mellifera</i> L.	API, Apinae	Z
GUINEA		2019 October 16 (Butterflies) (MS/4 & SS/1) (GU190409a&b)		
a	12500fr	Indian Leaf, <i>Kallima paralekta</i> Horsfield	NYM, Nymphalinae	A
b	12500fr	Blue Lacewing, <i>Cethosia cyane</i> Drury	NYM, Heliconiinae	A
c	12500fr	<i>Neope goschkevitschii</i> Ménétries	NYM, Satyrinae	A
d	12500fr	Freak, <i>Calinaga buddha</i> Moore	NYM, Calinaginae	A

GUINEA (continued)

N/A	SS 50000fr	Orange Kite-swallowtail, <i>Eurytides thyastes</i> Drury	PAP, Papilioninae	A
	Margin	Top: Alpine Black Swallowtail, <i>Papilio maackii</i> Ménétries	PAP, Papilioninae	Z
		LR: Marbled White, <i>Melanargia galathea</i> L.	NYM, Satyrinae	Z

2019 October 16 (Bee-Eaters) (MS/4) (GU190426a)

d	12500fr	U/I Bee (in bird's beak)	Hymenoptera	U C
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2019 December 11 (Bees) (MS/4 & SS/1) (GU190511a&b)

a	12500fr	<i>Rhodanthidium sticticum</i> Fabr.	MEG, Megachilinae	A
b	12500fr	Little Honeybee, <i>Apis florea</i> Fabr.	API, Apinae	A
c	12500fr	Brown Bumblebee, <i>Bombus pascuorum</i> Scopoli	API, Apinae	A
d	12500fr	Great Banded Furrow-bee, <i>Halictus scabiosae</i> Rossi	HAL, Halictinae	A
N/A	SS 50000fr	Buff-tailed Bumblebee, <i>Bombus terrestris</i> L.	API, Apinae	A
	Margin	R: Western Honeybee, <i>Apis mellifera</i> L.	API, Apinae	Z

GUINEA-BISSAU**2019 October 11 (Scouts) (MS/4 & SS/1) (GB190902a&b)**

d	800fr	Painted Lady, <i>Vanessa cardui</i> L. (w/ Scout)	NYM, Nymphalinae	B
N/A	SS Margin	LL: Painted Lady, <i>Vanessa cardui</i> L. (w/ Scout)	NYM, Nymphalinae	B Z

2019 December 10 (Butterflies) (MS/6 & SS/1) (GB191008a&b)

a	550fr	Common Buckeye, <i>Junonia coenia</i> Hübner	NYM, Nymphalinae	A
b	550fr	Common Blue, <i>Polyommatus icarus</i> Rottemburg	LYC, Polyommatae	A
c	550fr	Zebra Longwing, <i>Heliconius charithonia</i> L.	NYM, Heliconiinae	A
d	550fr	Giant Glasswing, <i>Methona confusa</i> Butler	NYM, Danainae	A
e	550fr	Christmas Butterfly, <i>Papilio demodocus</i> Esper	PAP, Papilioninae	A
f	550fr	Tiger Longwing, <i>Heliconius hecale</i> Fabr.	NYM, Heliconiinae	A
N/A	SS 3300fr	Menelaus Blue Morpho, <i>Morpho menelaus</i> L.	NYM, Morphinae	A
	Margin	R: Eastern Tiger Swallowtail, <i>Papilio glaucus</i> L.	PAP, Papilioninae	Z

NIGER**2019 November 4 (Malaria) (MS/4 & SS/1) (NIG190505a&b)**

b	800fr	<i>Anopheles</i> sp. (life cycle)	CUL, Anophelinae	C
c	800fr	Same species (applying larvicide to pond)	CUL, Anophelinae	C
N/A	SS 3300fr	Same species (anti-malarial symbol)	CUL, Anophelinae	C
	Margin	Bkgrd: Same species	CUL, Anophelinae	Z

2019 November 4 (Bees) (MS/4 & SS/1) (NIG190520a&b)

a	800fr	Little Honeybee, <i>Apis florea</i> Fabr.	API, Apinae	A
b	800fr	Western Honeybee, <i>Apis mellifera</i> L.	API, Apinae	A
c	800fr	Eastern Carpenter Bee, <i>Xylocopa virginica</i> L.	API, Xylocopinae	A
d	800fr	Giant Honeybee, <i>Apis dorsata</i> Fabr.	API, Apinae	A
N/A	SS 3300fr	Buff-tailed Bumblebee, <i>Bombus terrestris</i> L.	API, Apinae	A
	Margin	R: Violet Carpenter Bee, <i>Xylocopa violacea</i> L.	API, Xylocopinae	Z

2019 November 4 (Chinese Art) (SS/1) (NIG190525b)

N/A	SS 13000fr	Printed on silk from <i>Bombyx mori</i> L. (no insect shown)	Bombycidae	R
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ST. THOMAS & PRINCE IS.**2019 October 22 (Malaria) (MS/4) (ST190610a)**

c	31d	African Malaria Mosquito, <i>Anopheles gambiae</i> Giles	CUL, Anophelinae	C
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2019 October 22 (Butterflies) (MS/4 & SS/1) (ST190612a&b)

a	31d	Large Tree Nymph, <i>Idea leuconoe</i> Erichson	NYM, Danainae	A
b	31d	Banded Peacock, <i>Papilio palinurus</i> Fabr.	PAP, Papilioninae	A
c	31d	<i>Atrophaneura semperi</i> C&R Felder	PAP, Papilioninae	A
d	31d	Menelaus Blue Morpho, <i>Morpho menelaus</i> L.	NYM, Morphinae	A
	Margin	L: Peacock Pansy, <i>Junonia almana</i> L.	NYM, Nymphalinae	Z

ST. THOMAS & PRINCE IS. (continued)

N/A	SS 124d	Three-tailed Swallowtail, <i>Papilio pilumnus</i> Boisduval	PAP, Papilioninae	A
	Margin	UL: Tailed Jay, <i>Graphium agamemnon</i> L.	PAP, Papilioninae	Z
		LL: Monarch, <i>Danaus plexippus</i> L.	NYM, Danainae	Z

SIERRA LEONE**2019 October 30** (Bees) (MS/4 & SS/1) (SRL191003a&b)

a	12500le	R: Eastern Carpenter Bee, <i>Xylocopa virginica</i> L.	API, Xylocopinae	B
		L: U/I Fly	Diptera	U B
b	12500le	<i>Heriades crenulatus</i> Nylander (also at L)	MEG, Megachilinae	B
c	12500le	R: Little Honeybee, <i>Apis florea</i> Fabr.	API, Apinae	B
		L: <i>Bombus</i> sp.	API, Apinae	U B
d	12500le	Great Banded Furrow Bee, <i>Halictus scabiosae</i> Rossi (also at L)	HAL, Halictinae	B
	Margin	Top: Stylized Bee silhouette (w/ flower)	Hymenoptera	S Z
N/A	SS 50000le	Big Mining Bee, <i>Colletes daviesanus</i> Smith (also at L)	COL, Colletinae	B
	Margin	LL: Stylized Bee silhouette (w/ flower)	Hymenoptera	S Z
		UR: Scissor Bee, <i>Chelostoma rapunculi</i> Lepelletier	MEG, Megachilinae	Z

19 November 28 (Butterflies) (MS/4 & SS/1) (SRL191117a&b)

a	12500le	Great Mormon, <i>Papilio memnon</i> L.	PAP, Papilioninae	A
b	12500le	Malachite, <i>Siproeta stelenes</i> L.	NYM, Nymphalinae	A
c	12500le	Zebra, <i>Heliconius charithonia</i> L.	NYM, Heliconiinae	A
d	12500le	Thoas Swallowtail, <i>Papilio thoas</i> L.	PAP, Papilioninae	A
N/A	SS 50000le	Postman, <i>Heliconius melpomene</i> L.	NYM, Heliconiinae	A
	Margin	LL: Painted Lady, <i>Vanessa cardui</i> L.	NYM, Nymphalinae	Z

TOGO**2019 August 30** (Butterflies) (MS/4 & SS/1) (TG190462a&b)

a	800fr	Spicebush Swallowtail, <i>Papilio troilus</i> L.	PAP, Papilioninae	A
b	800fr	Clipper, <i>Parthenos sylvia</i> Cramer	NYM, Limenitidinae	A
c	800fr	Banded Peacock, <i>Papilio palinurus</i> Fab.	PAP, Papilioninae	A
d	800fr	Thick-tipped Greta Glasswing, <i>Greta morgane</i> ssp. <i>oto</i> Hewitson	NYM, Danainae	A
N/A	SS 3300fr	Scarlet Peacock, <i>Anartia amathea</i> L.	NYM, Nymphalinae	A
	Margin	Marbled White, <i>Melanargia galathea</i> L.	NYM, Satyrinae	Z

2019 August 30 (Beetles) (MS/4 & SS/1) (TG190463a&b)

a	800fr	Golden Stag Beetle, <i>Lamprima aurata</i> Latreille	LUC, Lamprinae	A
b	800fr	Giant Timber Beetle, <i>Xixuthrus heros</i> Heer	CER, Prioninae	A
c	800fr	Pine Chafer, <i>Polyphylla fullo</i> L.	SCA, Melolonthinae	A
d	800fr	Wasp Beetle, <i>Clytus arietis</i> L.	CER, Cerambycinae	A
	Margin	Bkgrd: U/I Beetle immatures	Coleoptera	U Z
N/A	SS 3300fr	European Rhinoceros Beetle, <i>Oryctes nasicornis</i> L.	SCA, Dynastinae	A
	Margin	LL: Beewolf Clerid, <i>Trichodes alvearius</i> Fabr.	CLE, Clerinae	Z

2019 August 30 (Dangerous Insects) (MS/4 & SS/1) (TG190464a&b)

a	800fr	Deer Botfly, <i>Cephenemyia</i> sp.	OES, Oestrinae	U A
b	800fr	Kissing Bug, <i>Triatoma infestans</i> Klug	RED, Triatominae	A
c	800fr	Asian Giant Hornet, <i>Vespa mandarinia</i> Smith (♂)	VES, Vespinae	A
d	800fr	Fire Ant, <i>Solenopsis geminata</i> Fabr.	FOR, Myrmicinae	A
	Margin	U/I Black Ants	Formicidae	U Z
N/A	SS 3300fr	<i>Anopheles stephensi</i> Liston	CUL, Anophelinae	A
	Margin	UL: U/I Flea	Siphonaptera	U Z
		LL: <i>Eciton burchellii</i> Westwood	FOR, Dorylinae	Z
		LR: U/I Flea (head)	Siphonaptera	U Z

ASIAN GIANT HORNET

According to an article by Neil Vigdor in *The New York Times* on 24 December 2019, an invasion of the Asian Giant Hornet (*Vespa mandarinia*) is threatening honey bees in the Pacific Northwest. These hornets are indigenous to Asia, but some appeared for the first time in December 2019, in Washington state, where agricultural officials have issued a pest alert and warned that the hornets pose a threat to honey bees. The hornets had previously turned up in British Columbia the previous August.

V. mandarinia is the world's largest hornet with a length of 1.8 inches (45 mm) and a wingspan up to 3 inches (75 mm). It has a stinger almost a quarter inch long that can inject a large amount of venom. It is native to temperate and tropical Eastern Asia where it is sometimes called the "yak-killer hornet."

Despite this fearsome name and size, the hornet primarily feeds on other insects, tree sap, and honey. It rarely attacks humans and other animals unless its nest is molested. The hornets nest in the ground, digging their own tunnels, or occupying tunnels created by other animals.

Professor May Berenbaum, head of the Entomology Department at the University of Illinois at Urbana-Champaign, said that the hornets can wipe out an entire beehive.

"They are sworn enemies of honey bees. I would say a bee's worst nightmare."

Professor Berenbaum said there was a possibility that the hornets were "stowaways" on a ship that crossed the Pacific and could be attracted to any kind of sugary fermenting cargo. They could have also nested in any soil used as ballast material in ships.

As they have evolved, honey bees in Asia have developed their own defenses against the Asian Giant Hornet. Professor Berenbaum said, "When a hornet gets into the nest, they mob the hornet and generate enough body heat to kill it."

Officials have advised residents to report any sightings

So far, the Asian Giant Hornet has appeared on only one stamp issue. On 1 July 2009, the Korean Democratic People's Republic issued a set of four stamps and a booklet of four (Sc#4849a) with one stamp depicting this species with a rose. The other stamps depict a Japanese Tiger Beetle (*Cicindela chinensis* ssp. *japonica*) with a dandelion, a Migratory Locust (*Locusta migratoria*) with a plant, and an ant (*Aphaenogaster famelica*) with a mushroom.

In addition, there are images of eight unidentified insects in the top margin of the pane along with small images of four others hovering around a group of flowers at the left.



Vespa mandarinia
DPR Korea, 2009, Sc#4846





PALEONTOLOGY

Editor

Michael Kogan, BU1863

New Listings



Scott#	Denom	Common Name/Scientific Name	Family	Code
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ALGERIA

2020 January 25 (Archeology) (Set/3)

	25d	Elephants & cat (on cave painting)	Elephantidae	R
	25d	Mammoth tusk, <i>Mammuthus</i> sp. (w/ petrified wood)	Elephantidae	A



Site of Ain Al Hanesh—Setif

Archeologists have discovered lithic tools and animal bones on the site of Ain Al Hanesh dating from 2.4 million years ago. The French paleontologist Camile Arambourg was able to prove the existence of a plio-pleistocene deposit, in addition to his classification of these fossilized bones (elephants, equids, cows, hippopotamus, rhinos, etc.), as well as cut pebbles constituting Oldowan sub-spheroidal and spheroidal polyhedrons that makes this discovery the first of its kind regarding very old archeological remains found next to fossilized bones of savanna animals.

CENTRAL AFRICAN REPUBLIC 2019 October 21 (Dinosaurs) (MS/4 & SS/1)^[1]

a	850fr	<i>Allosaurus</i>	†Allosauridae	A
b	850fr	<i>Tylosaurus</i>	†Mosasauridae	A
c	850fr	U/I Mosasaur	†Mosasauridae	U A
d	850fr	<i>Tyrannosaurus rex</i>	†Tyrannosauridae	A
N/A	SS 3300fr	<i>Prognathodon</i>	†Mosasauridae	A
	Margin	UL: <i>Tyrannosaurus rex</i>	†Tyrannosauridae	Z
		LL: U/I Mosasaur	†Mosasauridae	U Z
		Ctr: <i>Allosaurus</i>	†Allosauridae	Z

DJIBOUTI

2019 December 12 (Dinosaurs) (MS/4 & SS/1)^[1]

a	250fr	<i>Triceratops horridus</i>	†Ceratopsidae	A
b	250fr	<i>Gallimimus bullatus</i>	†Ornithomimidae	A
c	250fr	<i>Ankylosaurus magniventris</i>	†Ankylosauridae	A
d	250fr	<i>Tyrannosaurus rex</i>	†Tyrannosauridae	A
N/A	SS 1000fr	<i>Parasaurolophus walkeri</i>	†Hadrosauridae	A
	Margin	Ctr: <i>Tyrannosaurus rex</i>	†Tyrannosauridae	Z
		R: <i>Triceratops horridus</i>	†Ceratopsidae	Z

GUINEA

2019 December 11 (Fossils) (MS/4 & SS/1)^[1]

a	12500fr	<i>Tyrannosaurus rex</i> (fossil skeleton in rock)	†Tyrannosauridae	A
b	12500fr	Top: Trilobite, <i>Elrathia kingii</i> (fossil skeleton in rock)	†Alokistocaridae	B
		LL: <i>Keichousaurus hui</i> (fossil skeleton in rock)	†Keichosauridae	B
		R: <i>Triceratops horridus</i> (fossil skull) (Cap: <i>Ceratops horridus</i>)	†Ceratopsidae	B
c	12500fr	Star Ammonite, <i>Asteroceras stellare</i> (fossil skeleton in rock)	†Arietitidae	A
d	12500fr	<i>Protoceratops andrewsi</i> (fossil skeleton)	†Protoceratopsidae	A
N/A	SS 50000fr	Ammonite, <i>Perisphinctes virguloides</i> (fossil)	†Perisphinctidae	A
	Margin	Top: Ammonite, <i>Ammonites variocostatus</i> (fossil)	†Perisphinctidae	Z
		Ctr: <i>Rhamphorhynchus longicaudus</i> (fossil skeleton in rock)	†Rhamphorhynchidae	Z
		R: <i>Torvosaurus tanneri</i> (fossil skull)	†Megalosauridae	Z

GUINEA (continued)		2019 December 11 (Dinosaurs) (MS/4 & SS/1)^[1]		
a	12500fr	<i>Dilophosaurus wetherilli</i>	†Dilophosauridae	A
b	12500fr	<i>Plesiosaurus dolichodeirus</i>	†Plesiosauridae	A
c	12500fr	<i>Tylosaurus proriger</i>	†Mosasauridae	A
d	12500fr	<i>Parasaurolophus walkeri</i>	†Hadrosauridae	A
N/A	SS 50000fr	<i>Stegosaurus stenops</i>	†Stegosauridae	A
	Margin	R: <i>Plesiosaurus dolichodeirus</i>	†Plesiosauridae	Z
		Bot: <i>Tylosaurus proriger</i>	†Mosasauridae	Z
GUINEA-BISSAU		2019 October 11 (Dinosaurs) (MS/4 & SS/1)^[1]		
a	800fr	L: <i>Deinonychus antirrhopus</i>	†Dromaeosauridae	B
		R: <i>Postosuchus kirkpatricki</i>	†Rauisuchidae	B
b	800fr	<i>Triceratops horridus</i> (Cap: <i>Ceratops horridus</i>)	†Ceratopsidae	A
c	800fr	Top: <i>Arizonasaurus babbitti</i>	†Ctenosauriscidae	B
		Bot: <i>Coelurus bauri</i>	†Coeluridae	B
d	800fr	L: <i>Archaeopteryx lithographica</i>	†Archaeopterygidae	B
		R: <i>Ankylosaurus magniventris</i>	†Ankylosauridae	B
	Margin	LL: <i>Plateosaurus engelhardti</i>	†Plateosauridae	Z
		LR: <i>Nothosaurus mirabilis</i>	†Nothosauridae	Z
N/A	SS 3300fr	Top: <i>Tyrannosaurus rex</i>	†Tyrannosauridae	B
		Bot: <i>Tanystropheus conspicuus</i>	†Tanystropheidae	B
	Margin	UL: <i>Brontosaurus excelsus</i>	†Diplodocidae	Z
		LL: <i>Quetzalcoatlus northropi</i>	†Azhdarchidae	Z
		UR: <i>Pterodactylus antiquus</i>	†Pterodactylidae	Z
		MR: <i>Allosaurus fragilis</i>	†Allosauridae	Z
		LR: <i>Chialingosaurus kuani</i>	†Stegosauridae	Z
MOZAMBIQUE		2019 October 1 (Dinosaurs) (MS/4 & SS/1)^[1]		
a	116m	<i>Pachycephalosaurus wyomingensis</i>	†Pachycephalosauridae	A
b	116m	<i>Camptosaurus dispar</i> (Cap/Syn: <i>Camptonotus dispar</i>)	†Camptosauridae	A
c	116m	<i>Triceratops horridus</i> (Cap: <i>Ceratops horridus</i>)	†Ceratopsidae	A
d	116m	<i>Ornitholestes hermanni</i>	†Ornitholestidae	A
N/A	SS 300m	<i>Allosaurus fragilis</i>	†Allosauridae	A
	Margin	LL & MR: <i>Triceratops horridus</i> (Cap: <i>Ceratops horridus</i>)	†Ceratopsidae	Z
		Top: U/I Pterosaur	Order: †Pterosauria	U Z
		UR: U/I sauropod dinosaur	Clade: †Saurischia	U Z
ST. THOMAS & PRINCE IS.		2019 October 22 (Volcanos & Fossils) (MS/4 & SS/1)^[1]		
a	31d	U/I brachiopod fossil, <i>Terebratula</i> sp. (w/ Sabancaya, Peru)	Terebratulidae	U B
b	31d	U/I frog fossil (w/ Ol Doinyo Lengai, Tanzania)	Order: Anura	U B
c	31d	U/I crinoid fossil (w/ Mount Tongariro, New Zealand)	Class: Crinoidea	U B
d	31d	U/I ammonite (w/ Sakurajima, Kagoshima Prefecture)	Subclass: Ammonoidea	U B
	Margin	Bkgrd: U/I ammonites	Subclass: Ammonoidea	U Z
N/A	SS 124d	U/I fossil (w/ Mount Kilimanjaro, Tanzania)		U B
	Margin	LL: Trilobite, <i>Colpocoryphe grandis</i>	†Calymenidae	Z
		2019 October 22 (Extinct Animals) (MS/4 & SS/1)^[1]		
a	31d	†Saber-toothed Cat, <i>Smilodon populator</i>	Felidae	A
b	31d	†Pyrenean Ibex, <i>Capra pyrenaica</i> ssp. <i>pyrenaica</i>	Bovidae	A
c	31d	†Western Black Rhinoceros, <i>Diceros bicornis</i> ssp. <i>longipes</i>	Rhinocerotidae	A
d	31d	†Great Auk, <i>Pinguinus impennis</i>	Alcidae	A
N/A	SS 124d	†Mammoth, <i>Mammuthus primigenius</i>	Elephantidae	A
	Margin	R: †Saber-toothed Cat, <i>Smilodon populator</i>	Felidae	Z

ST. THOMAS & PRINCE IS. (cont) 2019 November 19 (Dinosaurs) (MS/4 & SS/1)^[1]

a	31d	<i>Spinosaurus aegyptiacus</i>	†Spinosauridae	A
b	31d	<i>Parasaurolophus walkeri</i>	†Hadrosauridae	A
c	31d	† <i>Doedicurus clavicaudatus</i>	Chlamyphoridae	A
d	31d	<i>Lambeosaurus lambei</i>	†Hadrosauridae	A
N/A	SS 124d	<i>Diabloceratops eatoni</i>	†Ceratopsidae	A
	Margin	R: <i>Spinosaurus aegyptiacus</i>	†Spinosauridae	Z

SIERRA LEONE 2019 November 28 (Dinosaurs) (MS/4 & SS/1)^[1]

a	12500le	<i>Triceratops horridus</i>	†Ceratopsidae	A
b	12500le	L: <i>Altirhinus kurzanovi</i> R: <i>Pteranodon longiceps</i>	Order: †Ornithischia †Pteranodontidae	B B
c	12500le	L: <i>Coelurus bauri</i> R: <i>Dilophosaurus wetherilli</i>	†Coeluridae †Dilophosauridae	B B
d	12500le	<i>Stegosaurus stenops</i>	†Stegosauridae	A
N/A	SS 50000le	<i>Brachiosaurus altithorax</i>	†Brachiosauridae	A
	Margin	UL: <i>Pteranodon longiceps</i> LL: <i>Stegosaurus stenops</i> LR: <i>Triceratops horridus</i>	†Pteranodontidae †Stegosauridae †Ceratopsidae	Z Z Z

Personalized Issue**BRAZIL****2019 December 12 (Dinosaurs) (Set/2)**

N/A	(1.95r)	<i>Vespersaurus paranaensis</i> (inscr. “1° Porte Carta Comercial”)	†Noasauridae	A
N/A	(1.95r)	<i>Caiuajara dobruskii</i> (inscr. “1° Porte Carta Comercial”)	†Tapejaridae	A

**Local Stamps****DONETSK PEOPLE'S REPUBLIC 2019 November 15 (95th anniv. Donetsk Regional History Museum)**

Note: The Donetsk People's Republic (DPR) is a self-declared proto-state in the Donetsk Oblast of Ukraine recognized only by similar self-declared South Ossetia and Luhansk People's Republic (LPR). The DPR is de facto fully controlled by Russia, who support it militarily and financially. Russian rubles are used as an official currency in the territory. Ukraine is at war with the DPR and LPR. These “republics” are designated by Ukraine as terrorist organizations. Please think twice if you wish to support the authority of this territory by buying this stamp.

This stamp can be used inside of the territory and in some cases even for international mails. However, according to FIP regulations, issues of countries that are not recognized by the UPU are not allowed to be used at exhibitions organized or sponsored by FIP. The FIP recommends to collectors avoid these stamps at their collections.

On 15 November 2019, the postal authority of Donetsk People's Republic issued a stamp for the “95th anniversary of the Donetsk regional museum of local history” that shows the skeleton of a mammoth in the foreground and the museum building in the background. The face value of 18 Russian rubles equals the rate for a domestic letter with weight up to 20 grams.

N/A	18r	†Mammoth, <i>Mammuthus</i> sp.	Elephantidae	B
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Commemorative Postmarks

DONETSK PEOPLE'S REPUBLIC 2019 November 15 (95th anniv. Donetsk Regional History Museum)
The commemorative postmark used on first day covers for the local stamp described above shows a similar design as the stamp.

ALGERIA 2020 January 25 (Archeology) (Set/3)
Replication of the elephant image from the cave painting, as depicting on one stamp of the set

Future Issues


2020.03.04: **Hungary:** Dinosaurs and prehistoric reptiles of Hungary
2020.03.13: **Slovenia:** Mammal fossils: Dwarf Rhinoceros, *Prohyracodon telleri*
2020.03.23: **Spain:** Museum of Human Evolution in Burgos
2020.05.20: **Russia:** Paleontological heritage (Set/4)

Notes:

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

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

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



<http://www.paleophilatelie.eu>
focal point between
Paleontology and Philately

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

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

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

Contact: admin@paleophilatelie.eu

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E-mail: info@fauna-stamps.com / Telefon: + (420) 773 133 955

BIOLOGY REFERENCE WEBSITES

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

STAMP ISSUES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GENERAL

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

<http://stamps.org/>

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

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

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

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

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

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

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

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

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

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

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

<http://zipcodezoo.com/>

BOTANY

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

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

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

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

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

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

ENTOMOLOGY:

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

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

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

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

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

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

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

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

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

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

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

<https://entomologytoday.org/>

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

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

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

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

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

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

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

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

HERPETOLOGY:

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

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

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

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

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

<https://ssarherps.org/>

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

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

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

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

ICHTHYOLOGY

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

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

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

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

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

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

MAMMALS

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

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

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

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

ORNITHOLOGY

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

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

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

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

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

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

PALEONTOLOGY:

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

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

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

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

GLOSSARY OF TERMS

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

Checklist Codes:

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

Acronyms and Abbreviations:

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

Entomology Family Abbreviations:

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

Collecting Codes

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