BIOPHILATELY

OFFICIAL JOURNAL OF THE BIOLOGY UNIT OF ATA JUNE 2020 VOLUME 69 NUMBER 2

Enough Already! But COVID-19 is a Biological topic!







See Page 78















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BIOPHILATELY

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Vacant

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

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

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

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

FROM THE INTERIM EDITOR'S DESK

As many of you have probably gathered, this is a sad time for the Biology Unit. We lost our editor when Jack Congrove died unexpectedly in April (see page 76 for his obituary). Jack sent a message March 21, alerting our Unit President and Secretary that he was about to enter the hospital for tests to determine the extent of a pancreatic tumor. He went home after outpatient surgery, but had to return to the emergency room. His sister and nephew came from Ohio to be with him, and she kept me apprised of the prognosis each day.

Jack had been editing Biophilately since 2010, when he took over from Alan Hanks. In order to put out a journal for June, I agreed to be an interim editor. I do not want to continue doing this job, because I am already serving as Secretary, Treasurer, Webmaster and Associate Editor for Botany.

I am pleading desperately for someone in the Study Unit to take over as editor.

So what does the position involve? There are associate editors who put together the new issue lists. Jack used to go over these lists very carefully and point out any typos or errors. When the journal is submitted for a philatelic literature competition, the major criticism is that there are not enough original articles. So the editor needs to solicit additional articles for publication. They could be reprints from other journals, or from past issues of Biophilately. The editor is not responsible for publishing Biophilately. Dick Roman, as our publisher since 2011, has been responsible for printing and mailing the journal from a pdf file sent by the editor. We are currently investigating a printer in Minnesota as a publisher.

Helpful skills are working with publishing software, manipulating images and pdf files.

Please contact me at chris-dahle@biophilately.org if you are at all interested in taking over this most important position for our Study Unit. We can help out with anyone getting started. You don't have to be a resident of the United States. Our Associate Editor for Mammals is in the U.K., for Paleontology in Germany and a Co-editor for Entomology is in Angola. It is easy to electronically transfer files, even the large ones we generate for the journal.

Our long-time Associate Editor for marine Invertebrates decided recently to pursue other interests. We are still looking for a replacement. If there is a Microbiologist in our membership, we would appreciate your expertise in serving as our Associate Editor for Microbiology.

Jack innovated when he took over as editor. He introduced the colored cover and called for a column on New Plants. He advocated for a Microbiology new issues list. We will miss his enthusiasm and expertise greatly.

Christopher Dahle BU 1269

DUES RATES (US\$)

US membership \$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

The last few months have certainly been trying for all of us. For many they have been filled with emotion and loss. We all need to support those who have lost family, friends or financial means. As the Corona Virus lessens it's grip on this country, we are slowly getting back to normal. I had planned to write about the GREAT AMERICAN STAMP SHOW, which is to be held the third week end of August. At this time, as I write, there is no final word on whether it will go on or be cancelled. It has been hard hearing of all the shows that are cancelling because of the virus. I certainly enjoy the personal contact with dealers and fellow collectors. Hopefully we will all see each other soon.



On a personal note to all of the ATA and Biology Study Unit, I am saddened to report the death of our dear friend Jack Congrove. He was an integral part of both the ATA and the Bio Unit for so long. Jack was Vice President of our unit as well as editor of Biophilately, shoes that will be difficult to fill. Jack was a mentor to so many, whether through his local stamp club or through the ATA. He loved Alexander Hamilton. His exhibit on Hamilton was fantastic. I remember at New York 2016 Jack was so excited, he had scored tickets to HAMILTON! on Broadway. He will always be remembered for his hats. Jack always wore a baseball cap, and at shows a topically themed shirt. We will miss you Jack!

During the stay at home time I have decided to redo my garden. I want an English Cottage Garden! I have planted Rose bushes, Phlox, Hollyhocks, Larkspur, Foxglove, Lavender, Anemone, Columbine, Lily of the valley, Hyssop, and Canterbury bells. And of course I have started a climbing rose on the mandatory arbor! Birds are flocking to the feeders, I could watch them for hours.

I hope everyone is well and finding enough things to do. Please stay safe and enjoy your stamps.

Laurie Ryan

SECRETARY TREASURER'S CORNER

The Secretary would like to apologize to members who received the wrong form for renewing their membership in the Unit. The form that you received was for an initial application to the Biology Unit. If you have not yet renewed, please do so now.

Jack Congrove was a mainstay of the Biology Unit for many years and a personal friend. When my wife and I went to Seattle to join a cruise to Alaska, we were able to accept Jack's invitation to visit. He picked us up at the airport, then took us to one of Seattle's finest restaurants. After dinner we went to the Space Needle, but with long lines to go up, we decided against that. Jack was at many of the



National Topical Stamp Shows during the last couple of decades, and would step in to run the Annual meeting if there were no other officers available.

ANNUAL MEETING CANCELED

The Annual Meeting of the Biology Unit was scheduled for the Great American Stamp Show, August 20-23 in Hartford, Connecticut and now canceled.

ALBUM CLOSED

IN MEMORIAM: JACK R. CONGROVE (BU1424)

Jack R. Congrove of Ft. Lewis, Wash., an ATA leader for 35 years, died April 8, 2020, of cancer at age 72.

Just prior to his death, he was presented the ATA's highest award, Distinguished Topical Philatelist, given to individuals who have made significant contributions to philately, especially topical philately.

PEX

The award will also be presented this year to Wayne L. Youngblood.

Jack filled many roles in ATA over the years. He joined the ATA board in 2015, and became second vice president in 2016. As a member of the ATA executive board, he provided leadership in finance and strategic planning, and ATA benefitted in many ways from his creative ideas and practical problem-solving skills. He was willing to take on big projects, but was also available for small chores at stamp shows, such as cancelling cachets or setting up a booth. He chaired the Portland National Topical Stamp Show (NTSS) with Orlie Trier in 2015.

Most recently he was co-editor of ATA handbook #168, Topical Adventures – A Guide to Topical and Thematic Stamp Collecting, which will be published this summer. Martin Kent Miller is designing the sections that were not

finished by Jack.

Alexander Hamilton: Soldier, Financier, Statesman, Founder, Jack's acclaimed exhibit, won the Grand Award and large gold medal at the NTSS in 2018. He subsequently showed the exhibit in the APS Champion of Champions exhibition in Omaha, Neb., 2019. He also exhibited Covered Bridges of Fairfield County, Ohio. He collected butterfly and moth stamps, and planned to prepare an exhibit.

Jack was an accomplished philatelic writer and editor. He edited Biophilately, the gold medal winning journal of the Biology Study Unit from 2011 until his death. He also served as a director of the unit for the past 10 years. In 2013, he wrote the history of the unit.

Jack edited the Federated Philatelist, the journal of the Northwest Federation of Stamp Clubs, from 2014 until his death. In 2016, the Federation recognized Jack with their highest honor, the Northwest Distinguished Philatelist Award, for his contributions to philately. He was also editor of the newsletter of the Northwest chapter of the American Airmail Society.

One of Jack's favorite projects was the Seattle Philatelic Exhibition (SEAPEX). He was instrumental in gaining World Series of Philately status for SEAPEX in 2015, and served as president of the board. Jack was an active member in the Evergreen Stamp Club in Kent, Wash., giving presentations and assisting greatly at the bi-annual club shows. Jack was instrumental in securing ATA Chapter status for the club in 2016.

An APS member since 2012, Jack frequently volunteered in the youth section at its shows. In 2017, he received the Nicholas Carter Recognition Award for National Service. He was a member of many philatelic organizations, including the American Association of Philatelic Exhibitors, Women Exhibitors, Military Postal History Society, Americana Study Unit, Rocky Mountain Philatelic Library, Biology Study Unit, Gastronomy on Stamps Study Unit and Wine on Stamps Study Unit.

Jack grew up on his parents' dairy farm in Pickerington, Ohio, where he learned his strong work ethic and developed the habit of getting up at 5 a.m., something he did his entire life. He was valedictorian of his high school class and continued to stay in touch with his classmates. He went on to earn a B.S. degree in chemical engineering at Ohio University.

After serving 20 years as a US Army field artillery officer, Jack retired at the rank of major. He served in Vietnam, Germany and on the UN Peace Keeping Forces in the Middle East. Following retirement, he worked for a contractor supporting Army testing at Joint Base Lewis McChord in Ft. Lewis, Wash. He also owned a printing and publishing company, where he edited academic and commercial publications.

Jack had many friends throughout the world. When we hear the phrase, "When you want to get something done, ask a busy person," he immediately comes to mind. He will be remembered for his warmth, ready smile and, of course, for his signature apparel—the baseball cap.

[Ed: This obituary is posted on the ATA web site. The original can be found at http://americantopicalassn.org/jcongroveobit.shtml. It also appeared in the May-June issue of **Topical Time.**]

Jack R. Congrove Memorial Fund

April 15, 2020

At the request of numerous people, we have established a memorial fund to honor Jack R. Congrove, ATA second vice president and 35-year member, who died April 8. Contributions can be sent to the ATA office, and the family will be notified. Jack was an accomplished writer and editor. Funds will be earmarked for ATA publications. Please note on your check or PayPal contribution: Jack Congrove Memorial, and mail to ATA, PO Box 2143, Greer, SC 29652-2143. PayPal contributions can be made to

http://americantopicalassn.org/home.shtml

VACANCY ON BOARD OF DIRECTORS

We need to replace Jack Congrove on the Board of Directors. If anyone would like to volunteer to fill this position, please contact the Secretary at chris-dahle@biophilately.org. The position is not very demanding, mostly consulting by email when decisions need to be made.

NEW MEMBERS

Welcome to the Biology Unit to the following:

1901	Wilfrid Wells, Australia	all biology (3) especially birds (5) and flowers (2)
1902	Rainer Schindwolf, Germany	recent (3) and prehistoric mammals (0), zoos and aquaria
1903	Prathmesh Patel, Alta Loma, CA	birds of prey (5), flora (2) & fauna (3), medicine, railways
1904	Joyce Lavery, Murfeesboro, TN	elephants, whales, dogs & pets, squirrels, giraffes (3), birds (5)
1905	Melanie Parker, Clarion, PA	butterflies (7)

REINSTATED MEMBERS

1294 David Donsker, North Hampton, NH mammals (8) birds (5), reptiles & amphibians (4)

Philatelic Responses to COVID-19

It is now becoming clear that some countries have been able to combat the novel corona virus better than others. One approach to restrict the spread of the pandemic was extreme isolation, and complete

lowdown of cities. China did this to 11 million inhabitants of the city of Wuhan, where it seems the virus jumped from animals to humans. Chinese postal officials released images of two pairs of stamps. Both of them feature hospital workers and first responders combating the illness.

Another approach was taken in Korea, where authorities identified cases of infection and then tracked the contacts of infected individuals using cell phone data.

Other countries seem to have learned from the SARS (Severe Acute Respiratory Syndrome) epidemic in 2003. Countries that were hit hard by SARS, like Viet Nam and Taiwan, seem to be faring much better in their response to COVID-19. These countries have fewer cases and lower mortality than other countries. Viet Nam's stamps feature hospital workers on one



China planned to issue two pairs of stamps on 7 April, 2020, now postponed indeffinitely.

stamp and researchers on the other.

In Europe, Italy and Spain have had the highest number of cases of COVID-19. It is not clear why these nations were affected so severely. Infections and deaths have been very high. Spain has issued stamps thanking the health care workers.

Viet Nam issued a pair of stamps 31 March 2020

Switzerland has not seen as high a proportion of infection as other countries. It has issued

an interesting image on semi-postal stamps. The design is also a

fascination. The stamp was issued on April 4 in sheets of 10 with a value of 1 CHF and a surcharge of 5 CHF. The sheets are sold for 50 CHF, which means that the 50 francs go to charity, Swiss Solidarity and

the Red Cross. The Swiss Post Office essentially is offering 10 free stamps.



The stamp was designed at Berne-based studio Nulleins Kommunikationsdesign by Alexandra Steiner. They were printed by Joh. Enschedé, Haarlem, Netherlands in 4 colors by offset on white stamp paper with matt gum.

The stamp symbolizes solidar- Iran has seen one of the highest incidences of infection,

with many deaths. This stamp was one of the first to be issued, as early as

the center, with the encircled March 17, showing medical workers.

ity during the coronavirus pandemic: with Switzerland at cross revealing a shining globe.

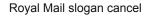
The United States as of this writing has seen the highest number of cases and the greatest death toll. Infection rates are expected to climb in Africa and South America. North African countries like Morocco and Tunisia saw outbreaks first. Brazil and Ecuador have both seen accelerating cases.



For all of these the advice to prevent infection is "Stay Home."

https://www.postoveznamky.sk/tribute-to-first-line-warriors-coronavirus-covid-19-pandemic-and-philately For those of you who need an update about viruses and how to protect yourself, is a fact sheet from Johns Hopkins University Infectious Disease Department:

- * The virus is not a living organism, but consists of protein molecules and RNA covered by a protective layer of lipid (fat), which, when absorbed by the cells of the ocular, nasal or buccal mucosa, changes their genetic code and converts them into aggressor and multiplier cells.
- * Since the virus is not a living organism but a protein molecule, it is not killed, but decays on its own. The



Royal Mail Both & West

Yorkshire .

19-45-59

STAY HOME.

PROTECT THE NAS

Royal Mail - keeping

disintegration time depends on the temperature, humidity and type of material where it lies.

* The virus is very fragile; the only thing that protects it is a thin outer layer of fat. That is why any soap or detergent is the best remedy, because the foam CUTS the FAT (that is why you have to rub so much: for 20 seconds or more, to make a lot of foam). By dissolving the fat layer, the protein molecule disperses and breaks down on its own.



- * HEAT melts fat; this is why it is so good to use water above 77 degrees Fahrenheit for washing hands, clothes and everything. In addition, hot water makes more foam and that makes it even more useful.
- * Alcohol or any mixture with alcohol over 65% DISSOLVES ANY FAT, especially the external lipid layer of the virus.
- * Any mix with 1 part bleach and 5 parts water directly dissolves the protein, breaks it down from the inside.
- * Oxygenated water helps long after soap, alcohol and chlorine, because peroxide dissolves the virus protein, but you have to use it pure and it hurts your skin.
- * NO BACTERICIDE OR ANTIBIOTIC SERVES. The virus is not a living

organism like bacteria; antibodies cannot kill what is not alive.

- * NEVER shake used or unused clothing, sheets or cloth. While it is glued to a porous surface, it is very inert and disintegrates only
- between 3 hours (fabric and porous),
- 4 hours (copper and wood)
- 24 hours (cardboard),
- -42 hours (metal) and
- 72 hours (plastic).



Dublin, Ireland slogan cancel

But if you shake it or use a feather duster, the virus molecules float in the air for up to 3 hours, and can lodge in your nose.

- * The virus molecules remain very stable in external cold, or artificial as air conditioners in houses and cars. They also need moisture to stay stable, and especially darkness. Therefore, dehumidified, dry, warm and bright environments will degrade it faster.
- * UV LIGHT on any object that may contain it breaks down the virus protein. For example, to disinfect and reuse a mask is perfect. Be careful, it also breaks down collagen (which is protein) in the skin.
- * The virus CANNOT go through healthy skin.
- * Vinegar is NOT useful because it does not break down the protective layer of fat.
- * NO SPIRITS, NOR VODKA, serve. The strongest vodka is 40% alcohol, and you need 65%.

- * LISTERINE IF IT SERVES! It is 65% alcohol.
- * The more confined the space, the more concentration of the virus there can be. The more open or naturally ventilated, the less.
- * You have to wash your hands before and after touching mucosa, food, locks, knobs, switches, remote control, cell phone, watches, computers, desks, TV, etc. And when using the bathroom.
- * You have to Moisturize dry hands from so much washing them, because the molecules can hide in the micro cracks. The thicker the moisturizer, the better.
- * Also keep your NAILS SHORT so that the virus does not hide there.

Chris Dahle BU 1269

Garden Stamps

Ten new stamps from the U.S. Postal Service celebrate the beauty of American gardens.

Each stamp features a photograph of a small but evocative area of one of ten gardens: The gardens include: Biltmore Estate Gardens (North Carolina); Brooklyn Botanic Garden (New York); Chicago Botanic Garden (Illinois); Coastal Maine Botanical Gardens (Maine); Dumbarton Oaks Garden (District of Columbia); The Huntington Botanical Gardens (California); Alfred B. Maclay Gardens State Park (Florida); Norfolk Botanical Garden (Virginia); Stan Hywet Hall & Gardens (Ohio); and Winterthur Garden (Delaware).

The love of gardening stretches back to the earliest years of our country, inspiring George Washington, Thomas Jefferson, and other Founding Fathers to plant some of America's most iconic colonial-era gardens. From the 19th century to today, landscape designers have continued that tradition. Conceived for many reasons—for food or pleasure, as places of education and scientific study, as an expression of the owners' artistic sensibilities, as spaces for the public to commune with nature, or simply for the love of gardening—American gardens capture our imagination and satisfy a yearning for beauty and order.

Every year, millions of Americans visit gardens, public and private. Many public gardens are open year-round; in addition to the plants and trees on display, classes, exhibits, and other events encourage visitors to experiment and



create their own gardens. During the spring and summer, planned tours and open garden days allow visitors to step into private enclaves and see how homeowners have enhanced and designed their spaces, be they large estates, small suburban yards, or rooftop aeries. Art director Ethel Kessler designed the stamps with photos taken by Allen Rokach between 1996 and 2014.

https://store.usps.com/store/product/buy-stamps/american-gardens-S 572704

Prehistoric Life of the Bakony Site, Hungary, Part 1

Dr. Peter Voice, BU 1863

Western Michigan University and the Michigan Geological Survey

This article describes the 2020 issue from Hungary – the World of the Bakony Dinosaurs II. It is the second in a series of issues from Hungary, with the first set published in 2018. The 2020 stamps were releases as a souvenir sheet with 6 stamps (Figure 1). A special imperforate version was also printed (4,000 numbered sheets) but is not useable as postage (Figure 2). In addition, an official first day cover (Figure 3) and postmark (Figure 4) were released for the First Day Ceremony on March 4.



Figure 1: The 2020 Dinosaurs of the Bakony World Set, Hungary.



Figure 2: An example of the imperforate special souvenir sheet.

Scott Catalogue numbers have not been issued yet for these stamps. [Numbers were published in the May issue of Scott's Monthly Update, Scott #4545a-f. Ed.] The geological context of the Bakony Region will be explored in part 2, we will focus on the species shown on the 2020 set in this article. The 2020 set includes depictions of reconstructions of Hungarobatrachus sukachi, Mochlodon vorosi, Bauxitornis mindszentyae, Atractosteus, Foxemys trabanti, and Doratodon carcharidens.

Hungarobatrachus sukachi is one of the most unusual fossils from the Bakony site – as frogs generally do not preserve well in the fossil record as their bones are usually to delicate. Fossils include portions of the pelvic girdle. The paleontologists who described the fossil interpreted the pelvic girdle structure, suggesting that this frog was equally at home in both the terrestrial word and in water, able to both jump and swim. It is the oldest true frog found in Europe to date.

Two bird species are known from the Iharkút locality – *Bauxitornis mindszentyae* and a second un-named species represented by a small thigh bone. Both species are members



Figure 3: The Official first day cover which is illustrated with individuals of **Mochlodon vorosi** watching the hatching of their young.

of the Enantiornithes, an extinct clade of birds from the Late Cretaceous with some more dinosaurian characteristics including teeth and clawed fingers on the wings. *Bauxitornis mindszentyae* is known

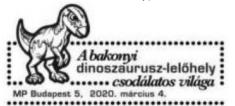


Figure 4: Special Postmark for the First Day Ceremony. Picture courtesy of Michael Kogan (http://www.paleophilatelie.eu/index.html).

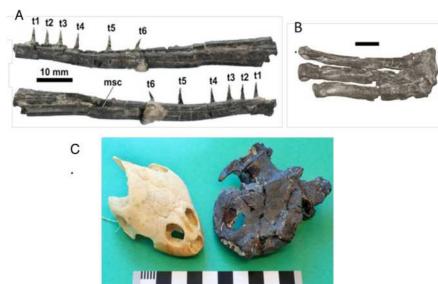
from about a dozen bones (mostly from the feet – figure 5b) and was the size of a modern buzzard. The type specimen was discovered in a bauxite mine – hence the name "bird of the bauxite". The species was also named after Andrea Mindszwenty, a geologist at Eötvöw Lorand University in Budapest, Hungary.

Mochlodon vorosi is the only non-avian dinosaur in the 2020 set. It was a small herbivore, measuring in length. The name *Mochlodon* is derived from Greek mokhlos – bar and odon-

tooth and describes the bar-shaped ridges on the teeth. It is also named after Paleontologist Attila Vörös. One of its closer (and much larger) relatives is the famous *Iguanodon*.

Atractosteus sp. is a genus of gar that ranges from the Early Cretaceous to the present. In fact, three living species including the Alligator Gar (A. spatula) are found in North and Central America today. At the Iharkút locality, Atractosteus and a related genus Lepisosteus are known from a variety of fragmentary fossils of the jaws (Figure 5a), skull, vertebrae and scales.

Foxemys trabanti is one of the most common fossils at the Iharkút locality with abundant fossils of skulls (Figure 5c), shells, vertebrate, pelvic and pectoral girdles, and limb bones. Foxemys is a turtle – and the species Foxemys trabanti was named in honor of the Trabant 601 (a type of vehicle that



vertebrate, pelvic and pectoral girdles, and limb bones. *Foxemys* is a turtle – and the species *Foxemys* trabanti was named in honor of the vertebrate, pelvic and pectoral girdles, and limb bones. *Foxemys* is a turtle – and the species *Foxemys* trabanti was named in honor of the vertebrate, pelvic and pectoral attractors and pectoral specimens from the Bakony Region. 5A. jaws from Atractosteus sp. from Szabo et al. (2016) 5B. Metatarsal bones (foot) of Bauxitornis mindszentyae. Picture from Wikipedia.org. 5C. Comparison of the modern side-necked turtle, *Podocnemis unifilis* from Brazil with *Foxemys* trabanti was named in honor of the centimeters. Picture from http://magyardinoszaurusz.hu/en/foxemys-trabanti/.

the researchers used during their field expeditions to Bakony). *Foxemys* is a genus within a larger group of turtles that are informally referred to as side-neck turtles – because when they retract their head into the shell, they retract it horizontally to the side. *Foxemys trabanti* is interpreted as a durophage – an animal that eats shelled animals like snails or bivalves.

The last stamp in the set commemorates *Doratodon carcharidens*, a terrestrial crocodile. The few fossil specimens from the Iharkút locality include jaw fragments and sharp, serrated teeth. Similar specimens have been found from Late Cretaceous rocks of Austria.

Part 2 will explore the 2018 issue and describe the world of the Bakony region during the Late Cretaceous in more detail.

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Magyar Post Materials for the 2018 and 2020 issues:

https://www.posta.hu/stamps/stamps/new-stamps/the-world-of-the-bakony-dinosaurs https://www.posta.hu/stamps/stamps/new-stamps/the-world-of-the-bakony-dinosaur-site-II

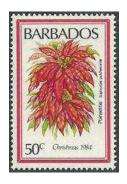
Hungarian and Eastern European Paleontology and Geology

http://magyardinoszaurusz.hu/en/

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BOTANY

Editor Christopher E. Dahle, BU1269



New Listings

Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code	
	BURMA (Myanmar) 2019 (Festivals type of 2019, see Vol. 68 (4) p.251)				
452		Nelumbo nucifera (Thidingyut Festival of Lights)	Nelumbonaceae	Fl B	
453		Luffa acutangula (Kathina Robe Offering Festival)	Cucurbitaceae	Fl B	
454	200k	Bulbophyllum auricomum (Myanmar Literature Festival)	Orchidaceae	Fl B	
CHINA (I	_	• ,	le)		
44603	\$1.20	Stylized tree		TAS	
ECUADO	R	2019 September 26 (Homage to Alexander	r Von Humboldt) (St	rip/5)	
2236a	\$1.00	Telipogon humboldtiana	Orchidaceae	Fl A	
2236b	\$1.00	Dichaea bonplandiana	Orchidaceae	Fl A	
2236e	\$1.00	Telipogon montufanriana	Orchidaceae	Fl A	
GERMAN	NY	2019 November 2 (Flower type of	2005) (Single)		
3131	370c	Fingerhut, foxglove, Digitalis purpurea	Plantaginaceae	Fl A	
		2020 January 2 (Flower type of 20	005) (Single)		
3130	30c	Daylily, Hemerocallis fulva (perf14)	Xanthorrhoeaceae	Fl A	
3132		Daylily, Hemerocallis fulva (SA die cut 10¼x10)	Xanthorrhoeaceae	Fl A	
		2020 January 2 (Van Gogh Paintii	ng) (Single)		
3147	155c	"Field of Poppies", <i>Papaver rhoeas</i> (perf 14)	Papaveraceae	Fl A	
3148		"Field of Poppies", <i>Papaver rhoeas</i> (SA die cut 11½x11½)	Papaveraceae	Fl A	
			•		
2069-72	OKI I AII	N (Isle of Man) 2020 January 15 (Year of Stylized flowers	the Rati (Set/4)	Fl B	
GUYANA		2019 April 15 (World Federation of Rose Societies Conve	ntion Nanvang) (SS/	'1)	
4595		Fenshan rose, <i>Rosa</i> 'Fenshan'	Rosaceae	Fl A SS	
		2019 June 17 (Amazon water lily)	(Sheet/4: SS/1)		
4607		Amazon water lily, Victoria amazonica	Nymphaeaceae	Fl A MS	
4608	\$800	Amazon water lily, Victoria amazonica	Nymphaeaceae	Fl A SS	
HUNGAF	V	2019 October 15 (Diplomatic relations wit	h Ianan 150v) (Shee	t/10)	
4535c		Chamomile flowers, Matricaria chamomilla	Asteraceae	Fl A MS	
4535d	60fo	Cherry blossoms, <i>Prunus serrulata</i>	Rosaceae	Fl A MS	
		2020 March 4 (Bakony Prehistoric	animals) (MS/6)		
4545		Tulip tree, water lily, magnolia, <i>Liriodendron tulipifera</i> ; <i>Nymph</i>).	
		Magnoliace	ae; Nymphaeaceae	Fl B MS Z	
INDIA		2019 August 1 (Sandalwood and jasmine s			
3125	25r	Sandalwood, Santalum album	Santalaceae	V B	
3125 3125a	231	Perf 13 ³ / ₄ x13 ¹ / ₄	Samaraccac	۷ ۷	
J 1 4 J a		1 VII 1J/4Λ1J/4			

INDIA (continued)			
3126		Sandalwood flowers, Santalum album	Santalaceae	Fl B
3126a		Perf 13 ³ / ₄ x13 ¹ / ₄		
3126b Sc	ouvenir she	eet of 2, #3125a, 3126a		
3127		Jasmine flowers and perfume, Jasminum officinale	Oleaceae	Fl B
3127a		Perf 13 ³ / ₄ x13 ¹ / ₄		
3128	25r	Jasmine flowers and perfume, Jasminum officinale	Oleaceae	Fl B
3128a So	uvenir she	eet of 2, #3127a, 3128		
		2019 October 15 (Agarwood and orange s	cented stamps) (Set/	4· SS/2)
3160	25r	Agarwood perfume, Aquillaria sp.	Thymelaceae	V B
3160a	231	Perf 13 ³ / ₄ x13 ¹ / ₄	Tilymoraceae	, 5
	ouvenir she	eet of 2, #3160a, 3161a		
3162		Orange blossoms, Citrus sinensis	Rutaceae	Fl B
3162a	-01	Perf 13 ³ / ₄ x13 ¹ / ₄		112
3163	25r	Orange fruit, Citrus sinensis	Rutaceae	Fr B
3163a		Perf 13 ³ / ₄ x13 ¹ / ₄		
	ouvenir she	pet of 2, #3162a, 3163a		
			ottondios) (MC/C)	
INDONI		2016 November 5 (Flowers and but Lantana and sage Lantana and sage)	, , , , , , , , , , , , , , , , , , ,	ELD MC
2453a 2453b		Lantana, red-sage, Lantana camara	Verbenaceae Fabaceae	Fl B MS Fl B MS
2453c		Archidendron sp. Bandicoot berry, Leea indica	Vitaceae	FI B MS
2453d		* '	Vitaceae Verbenaceae	FI B MS
2453u 2453e		Lantana, red-sage, Lantana camara	Verbenaceae	FI B MS
24536 2453f		Lantana, red-sage, Lantana camara	Vitaceae	FI B MS
24331	30001	Bandicoot berry, Leea indica	v naceae	LI D MIS
		2010 Name have f (Farma and flat	ma) (Dla als an atmin /6)	
		2018, November 5 (Fauna and flo	· · ·	
2490d		Koompassia excelsa	Fabaceae	ΤA
2490e	3000r	Koompassia excelsa Ironwood, billian, Eusideroxylon zwageri	Fabaceae Lauraceae	T A T A
	3000r	Koompassia excelsa	Fabaceae	ΤA
2490e 2490f	3000r	Koompassia excelsa Ironwood, billian, Eusideroxylon zwageri Borneo kauri, Agathis borneensis	Fabaceae Lauraceae	T A T A
2490e	3000r 3000r	Koompassia excelsa Ironwood, billian, Eusideroxylon zwageri Borneo kauri, Agathis borneensis 2017 (Single)	Fabaceae Lauraceae	T A T A
2490e 2490f IRAN	3000r 3000r	Koompassia excelsa Ironwood, billian, Eusideroxylon zwageri Borneo kauri, Agathis borneensis 2017 (Single) Lemon balm, Melissa officinalis	Fabaceae Lauraceae Araucariaceae	T A T A T A
2490e 2490f IRAN 3184	3000r 3000r 50,000r	Koompassia excelsa Ironwood, billian, Eusideroxylon zwageri Borneo kauri, Agathis borneensis 2017 (Single) Lemon balm, Melissa officinalis 2018 (Police Week) (Single)	Fabaceae Lauraceae Araucariaceae Lamiaceae	T A T A T A
2490e 2490f IRAN	3000r 3000r 50,000r	Koompassia excelsa Ironwood, billian, Eusideroxylon zwageri Borneo kauri, Agathis borneensis 2017 (Single) Lemon balm, Melissa officinalis	Fabaceae Lauraceae Araucariaceae	T A T A T A
2490e 2490f IRAN 3184	3000r 3000r 50,000r	Koompassia excelsa Ironwood, billian, Eusideroxylon zwageri Borneo kauri, Agathis borneensis 2017 (Single) Lemon balm, Melissa officinalis 2018 (Police Week) (Single)	Fabaceae Lauraceae Araucariaceae Lamiaceae Rosaceae	T A T A T A
2490e 2490f IRAN 3184	3000r 3000r 50,000r 12,000r	Koompassia excelsa Ironwood, billian, Eusideroxylon zwageri Borneo kauri, Agathis borneensis 2017 (Single) Lemon balm, Melissa officinalis 2018 (Police Week) (Single) Cap and rose, Rosa x hybrida	Fabaceae Lauraceae Araucariaceae Lamiaceae Rosaceae	T A T A T A
2490e 2490f IRAN 3184 3193	3000r 3000r 50,000r 12,000r 18,000r	Koompassia excelsa Ironwood, billian, Eusideroxylon zwageri Borneo kauri, Agathis borneensis 2017 (Single) Lemon balm, Melissa officinalis 2018 (Police Week) (Single) Cap and rose, Rosa x hybrida 2019 (Ceremony for making rosew Roses, Rosa x hybrida	Fabaceae Lauraceae Araucariaceae Lamiaceae Rosaceae vater) (Single)	T A T A T A Fl A
2490e 2490f IRAN 3184 3193 3208 IRELAN	3000r 3000r 50,000r 12,000r 18,000r	Koompassia excelsa Ironwood, billian, Eusideroxylon zwageri Borneo kauri, Agathis borneensis 2017 (Single) Lemon balm, Melissa officinalis 2018 (Police Week) (Single) Cap and rose, Rosa x hybrida 2019 (Ceremony for making rosew Roses, Rosa x hybrida 2020 January 24 (Single)	Fabaceae Lauraceae Araucariaceae Lamiaceae Rosaceae vater) (Single) Rosaceae	T A T A T A Fl A Fl B
2490e 2490f IRAN 3184 3193 3208 IRELAN 2217	3000r 3000r 50,000r 12,000r 18,000r	Koompassia excelsa Ironwood, billian, Eusideroxylon zwageri Borneo kauri, Agathis borneensis 2017 (Single) Lemon balm, Melissa officinalis 2018 (Police Week) (Single) Cap and rose, Rosa x hybrida 2019 (Ceremony for making rosew Roses, Rosa x hybrida 2020 January 24 (Single) Apples and blossoms in heart shape, Malus domestica	Fabaceae Lauraceae Araucariaceae Lamiaceae Rosaceae vater) (Single)	T A T A T A Fl A
2490e 2490f IRAN 3184 3193 3208 IRELAN 2217 2217a	3000r 3000r 50,000r 12,000r 18,000r	Koompassia excelsa Ironwood, billian, Eusideroxylon zwageri Borneo kauri, Agathis borneensis 2017 (Single) Lemon balm, Melissa officinalis 2018 (Police Week) (Single) Cap and rose, Rosa x hybrida 2019 (Ceremony for making rosew Roses, Rosa x hybrida 2020 January 24 (Single) Apples and blossoms in heart shape, Malus domestica Vert. pair on backing, no printing	Fabaceae Lauraceae Araucariaceae Lamiaceae Rosaceae vater) (Single) Rosaceae	T A T A T A Fl A Fl B
2490e 2490f IRAN 3184 3193 3208 IRELAN 2217 2217a 2217b	3000r 3000r 50,000r 12,000r 18,000r ND N (€1)	Koompassia excelsa Ironwood, billian, Eusideroxylon zwageri Borneo kauri, Agathis borneensis 2017 (Single) Lemon balm, Melissa officinalis 2018 (Police Week) (Single) Cap and rose, Rosa x hybrida 2019 (Ceremony for making rosew Roses, Rosa x hybrida 2020 January 24 (Single) Apples and blossoms in heart shape, Malus domestica Vert. pair on backing, no printing Bklt pane of 10	Fabaceae Lauraceae Araucariaceae Lamiaceae Rosaceae vater) (Single) Rosaceae Rosaceae	T A T A T A Fl A Fl B Fl B
2490e 2490f IRAN 3184 3193 3208 IRELAN 2217 2217a 2217b ISRAEL	3000r 3000r 50,000r 12,000r 18,000r ND N (€1)	Koompassia excelsa Ironwood, billian, Eusideroxylon zwageri Borneo kauri, Agathis borneensis 2017 (Single) Lemon balm, Melissa officinalis 2018 (Police Week) (Single) Cap and rose, Rosa x hybrida 2019 (Ceremony for making rosew Roses, Rosa x hybrida 2020 January 24 (Single) Apples and blossoms in heart shape, Malus domestica Vert. pair on backing, no printing Bklt pane of 10 2019 September 18 (Flowers) (Se	Fabaceae Lauraceae Araucariaceae Lamiaceae Rosaceae vater) (Single) Rosaceae Rosaceae	TATATA FIA FIB FIFTA
2490e 2490f IRAN 3184 3193 3208 IRELAN 2217 2217a 2217b ISRAEL 2234	3000r 3000r 50,000r 12,000r 18,000r ND N (€1)	Koompassia excelsa Ironwood, billian, Eusideroxylon zwageri Borneo kauri, Agathis borneensis 2017 (Single) Lemon balm, Melissa officinalis 2018 (Police Week) (Single) Cap and rose, Rosa x hybrida 2019 (Ceremony for making rosew Roses, Rosa x hybrida 2020 January 24 (Single) Apples and blossoms in heart shape, Malus domestica Vert. pair on backing, no printing Bklt pane of 10 2019 September 18 (Flowers) (Se Autumn Crocus, Sternbergia clusiana	Fabaceae Lauraceae Araucariaceae Lamiaceae Rosaceae Vater) (Single) Rosaceae Rosaceae t/3 with tabs, perf 13 Amaryllidaceae	TATAATA FIA FIB FIFTA
2490e 2490f IRAN 3184 3193 3208 IRELAN 2217 2217a 2217b ISRAEL 2234 2235	3000r 3000r 50,000r 12,000r 18,000r ND N (€1) 4.10s 4.10s	Koompassia excelsa Ironwood, billian, Eusideroxylon zwageri Borneo kauri, Agathis borneensis 2017 (Single) Lemon balm, Melissa officinalis 2018 (Police Week) (Single) Cap and rose, Rosa x hybrida 2019 (Ceremony for making rosew Roses, Rosa x hybrida 2020 January 24 (Single) Apples and blossoms in heart shape, Malus domestica Vert. pair on backing, no printing Bklt pane of 10 2019 September 18 (Flowers) (Se Autumn Crocus, Sternbergia clusiana Autumn grape hyacinth, Muscari parviflorum	Fabaceae Lauraceae Araucariaceae Lamiaceae Rosaceae Vater) (Single) Rosaceae Rosaceae Asaceae Asaceae Asaceae t/3 with tabs, perf 13 Amaryllidaceae Asparagaceae	TATAATA FIA FIB FIFTA **\frac{1}{4} \text{ x 13} \text{ FI A}{FI A}
2490e 2490f IRAN 3184 3193 3208 IRELAN 2217 2217a 2217b ISRAEL 2234	3000r 3000r 50,000r 12,000r 18,000r ND N (€1) 4.10s 4.10s	Koompassia excelsa Ironwood, billian, Eusideroxylon zwageri Borneo kauri, Agathis borneensis 2017 (Single) Lemon balm, Melissa officinalis 2018 (Police Week) (Single) Cap and rose, Rosa x hybrida 2019 (Ceremony for making rosew Roses, Rosa x hybrida 2020 January 24 (Single) Apples and blossoms in heart shape, Malus domestica Vert. pair on backing, no printing Bklt pane of 10 2019 September 18 (Flowers) (Se Autumn Crocus, Sternbergia clusiana	Fabaceae Lauraceae Araucariaceae Lamiaceae Rosaceae Vater) (Single) Rosaceae Rosaceae t/3 with tabs, perf 13 Amaryllidaceae	TATAATA FIA FIB FIFTA
2490e 2490f IRAN 3184 3193 3208 IRELAN 2217 2217a 2217b ISRAEL 2234 2235	3000r 3000r 50,000r 12,000r 18,000r ND N (€1) 4.10s 4.10s	Koompassia excelsa Ironwood, billian, Eusideroxylon zwageri Borneo kauri, Agathis borneensis 2017 (Single) Lemon balm, Melissa officinalis 2018 (Police Week) (Single) Cap and rose, Rosa x hybrida 2019 (Ceremony for making rosew Roses, Rosa x hybrida 2020 January 24 (Single) Apples and blossoms in heart shape, Malus domestica Vert. pair on backing, no printing Bklt pane of 10 2019 September 18 (Flowers) (Se Autumn Crocus, Sternbergia clusiana Autumn grape hyacinth, Muscari parviflorum	Fabaceae Lauraceae Araucariaceae Lamiaceae Rosaceae Vater) (Single) Rosaceae Rosaceae t/3 with tabs, perf 13 Amaryllidaceae Asparagaceae Amaryllidaceae	TATAATA FIA FIB FIFTA **\frac{1}{4} \text{ x 13} \text{ FI A} FI A FI A
2490e 2490f IRAN 3184 3193 3208 IRELAN 2217 2217a 2217b ISRAEL 2234 2235 2236	3000r 3000r 50,000r 12,000r 18,000r ND N (€1) 4.10s 4.10s 4.10s	Koompassia excelsa Ironwood, billian, Eusideroxylon zwageri Borneo kauri, Agathis borneensis 2017 (Single) Lemon balm, Melissa officinalis 2018 (Police Week) (Single) Cap and rose, Rosa x hybrida 2019 (Ceremony for making rosew Roses, Rosa x hybrida 2020 January 24 (Single) Apples and blossoms in heart shape, Malus domestica Vert. pair on backing, no printing Bklt pane of 10 2019 September 18 (Flowers) (Se Autumn Crocus, Sternbergia clusiana Autumn grape hyacinth, Muscari parviflorum Desert Pancratium, Pancratium sickenbergeri	Fabaceae Lauraceae Araucariaceae Lamiaceae Rosaceae Vater) (Single) Rosaceae Rosaceae t/3 with tabs, perf 13 Amaryllidaceae Asparagaceae Amaryllidaceae	TATATA FIA FIB FIFTA 1/4 x 13) FIA FIA FIA
2490e 2490f IRAN 3184 3193 3208 IRELAN 2217 2217a 2217b ISRAEL 2234 2235 2236	3000r 3000r 50,000r 12,000r 18,000r ND N (€1) 4.10s 4.10s 4.10s	Koompassia excelsa Ironwood, billian, Eusideroxylon zwageri Borneo kauri, Agathis borneensis 2017 (Single) Lemon balm, Melissa officinalis 2018 (Police Week) (Single) Cap and rose, Rosa x hybrida 2019 (Ceremony for making rosew Roses, Rosa x hybrida 2020 January 24 (Single) Apples and blossoms in heart shape, Malus domestica Vert. pair on backing, no printing Bklt pane of 10 2019 September 18 (Flowers) (Se Autumn Crocus, Sternbergia clusiana Autumn grape hyacinth, Muscari parviflorum Desert Pancratium, Pancratium sickenbergeri 2019 November 26 (Bklt, SA die Autumn Crocus, Sternbergia clusiana Autumn grape hyacinth, Muscari parviflorum	Fabaceae Lauraceae Araucariaceae Lamiaceae Rosaceae Rosaceae Rosaceae Rosaceae t/3 with tabs, perf 13 Amaryllidaceae Asparagaceae Amaryllidaceae cut 11¼ x 12¼) Amaryllidaceae Asparagaceae Asparagaceae	TATATA FIA FIB FIFTA 1/4 x 13) FIA FIA FIA
2490e 2490f IRAN 3184 3193 3208 IRELAN 2217 2217a 2217b ISRAEL 2234 2235 2236	3000r 3000r 50,000r 12,000r 18,000r ND N (€1) 4.10s 4.10s 4.10s	Koompassia excelsa Ironwood, billian, Eusideroxylon zwageri Borneo kauri, Agathis borneensis 2017 (Single) Lemon balm, Melissa officinalis 2018 (Police Week) (Single) Cap and rose, Rosa x hybrida 2019 (Ceremony for making rosew Roses, Rosa x hybrida 2020 January 24 (Single) Apples and blossoms in heart shape, Malus domestica Vert. pair on backing, no printing Bklt pane of 10 2019 September 18 (Flowers) (Se Autumn Crocus, Sternbergia clusiana Autumn grape hyacinth, Muscari parviflorum Desert Pancratium, Pancratium sickenbergeri 2019 November 26 (Bklt, SA die G	Fabaceae Lauraceae Araucariaceae Lamiaceae Rosaceae vater) (Single) Rosaceae Rosaceae t/3 with tabs, perf 13 Amaryllidaceae Asparagaceae Amaryllidaceae cut 11¼ x 12¼) Amaryllidaceae	TATATA FIA FIB FIFTA 1/4 x 13) FIA FIA FIA

ISRAEL	(Continue	ed)		
2239a		Bklt pane of 6, 2 each #2237-39		
		2019 September 18 (Honeybees	and flowers) (Set/3)	
2240		Sheet of 3	and nowers) (Seas)	
2240a	2.50s	Wildflowers		Fl B U
2240b		Citrus blossoms, Citrus sp.	Rutaceae	Fl B
2240c		Eucalyptus blossoms, <i>Eucalyptus sp.</i>	Myrtaceae	Fl B
		2020 February 4 (Single with tal	<i>,</i>)	
2251	(4.30c)	Rose, <i>Rosa x hybrida</i> (perf 14)	Rosaceae	Fl A
2252	(4.30s)	Rose, Rosa x hybrida (SA die cut $11 \times 10\frac{1}{2}$)	Rosaceae	Fl A
2252a	(4.505)	Pane of 12 + etiquettes	Rosuccuc	1171
JAPAN		2019 February 20 (Set/10)		
4275	COV	Sheet of 10, 2 each 4275a-e	D	T-1 A
4275a	62¥	Cherry blossoms, <i>Prunus serrulata</i> Bird and flowers	Rosaceae	Fl A Fl B U
4275b 4275c	62¥			FIBU
4275d		Flowers and butterfly Poppies, <i>Papaver orientale</i>	Danasyaragana	FlA
4275u 4275e		Dandelions, Taraxacum campylodes	Papaveraceae Asteraceae	Fl A
4276	024	Sheet of 10, 2 each 4276a-e	Asiciaccac	ITA
4276a	82¥	Cherry blossoms, Prunus serrulata	Rosaceae	Fl A
4276b		Rape blossoms and butterfly, <i>Brassica napus</i>	Brassicaceae	Fl A
4276c	82¥	· · · · · · · · · · · · · · · · · · ·	Rosaceae	Fl Fr A
4276d	82¥	Clover flowers and leaves, <i>Trifolium pratense</i>	Fabaceae	Fl V A
4276e	82¥	Tulips, <i>Tulipa x hybrida</i>	Liliaceae	Fl A
			narar Alzihita) (Sat/2)	
4278	92V	2019 February 22 (30th Anniversary Em Chrysanthemums, <i>Chrysanthemum</i> × <i>morifolium</i>	Asteraceae	Fl A
4276	02+		Asiciaccac	MA
4070		2019 March 6 (Set/20)		
4279	COV	Sheet of 10, 2 each 4279a-e	A .	T-1 A
4279a		Dandelions, Taraxacum campylodes	Asteraceae	Fl A
4279b 4279c		, ,	Fabaceae Brassicaceae	Fl A Fl A
4279e 4279e	62¥	Rape blossoms, <i>Brassica napus</i> Azaleas, <i>Rhododendron sp.</i>	Ericaceae Ericaceae	Fl A
4279e 4279g		Daffodils, Narcissus pseudonarcissus	Amaryllidaceae	Fl A
4279h			Amarymaccac	VAU
4279i	62¥	Peach and peach blossoms, <i>Prunus persica</i>	Rosaceae	Fl Fr A
4279j	62¥		Pithophoraceae	VA
4280		Sheet of 10, 2 each 4280a-e	F	
4280b	82¥	Bluets, Houstonia caerulea	Rubiaceae	Fl A
4280c		Violets, Viola sp.	Violaceae	Fl A
4280e		Rice seedlings, Oryza sativa	Poaceae	V A
4280f	82¥		Rosaceae	Fl A
4280g	82¥	Kerria flowers, Kerria japonica	Rosaceae	Fl A
4280j	82¥	Pussy willows, Salix sp.	Salicaceae	F1
		2019 April 1 (Set/10)		
4281		Sheet of 10, 2 each 4281a-e		
4281a	62¥		Asteraceae	Fl A
4281b	62¥	Apple blossoms, Malus domestica	Rosaceae	Fl A
4281c		Roses, Rosa x hybrida	Rosaceae	Fl A

JAPAN (con	tinued	1)		
4281d		Osmanthus, Osmanthus fragrans	Oleaceae	Fl A
4281e		Petunias, <i>Petunia x hybrida</i>	Solanaceae	Fl A
4282		Sheet of 10, 2 each 4282a-e		
4282a	82¥	Carnations, Dianthus caryophyllus	Caryophyllaceae	Fl A
4282b		Queen of the night, Epiphyllum oxypetalum	Cactaceae	Fl A
4282c		Roses, Rosa x hybrida	Rosaceae	Fl A
4282d		Sunflowers and cockscombs, Helianthus annuus; Celosia crista		
4282e		Irises, Iris japonica	Iridaceae	Fl A
		2019 April 12 (Flora & fauna of Kurobe C	Sorge) (Sheet/10)	
4283b	82¥	Japanese rowan, Sorbus commixta	Rosaceae	Fr A
4283e	82¥	-	Liliaceae	Fl A
4283f		Hosta, Hosta sp.	Asparagaceae	Fl A
4283h		Potentilla ancistrifolia var. dickinsii	Rosaceae	Fl A
120311	021	v		
4284		2019 April 19 (Screen painting by Kiitsu S Sheet of 10	Suzuki, 1/96-1858) (She	et/10)
4284a-j	82¥	Morning glories, <i>Ipomoea nil</i>	Convolvulaceae	Fl A
.20 j	0 - 1			
4201	COV	2019 May 28 (Set/5)	C	TF. A
4291		Japanese cypress, Chamaecyparis obtusa	Cupressaceae	TA
4292	62¥	e , e	Magnoliaceae	Fl A
4293	62¥	e , e	Fagaceae	Fr A
4294		Chinese fringe tree, Chionanthus retusus	Oleaceae	Fl A
4295	62¥	1 , 31	Iridaceae	Fl A
4295a		Vertical strip of 5		
1207		2019 May 30 (Set/10)		
4296	COM	Sheet of 10, 2 each 4296a-e	D 1: D /	T 4
4296c		Pineapple and lemons, Ananas comosus; Citrus limon	Bromeliaceae; Rutace	
4296e	62¥	Hibiscus flower, Hibiscus rosa-sinensis	Malvaceae	Fl A
4297	001	Sheet of 10, 2 each 4297a-e	C 1 1	T-1 A
4297a		Morning glories, <i>Ipomoea nil</i>	Convolvulaceae	Fl A
4297d	82¥	Watermelon, Citrullus lanatus	Cucurbitaceae	Fr A
		2019 June 19 (Stylized flowers) (S	Set/12)	
4304	COXX	Sheet of 10, #4304c,f, 2 each of #4304a, b, d, e		
4304a		Anemones, Anemone coronaria	Ranunculaceae	Fl A
4303b		Tulips, <i>Tulipa x hybrida</i>	Liliaceae	Fl A
4304c		Morning glories, <i>Ipomoea nil</i>	Convolvulaceae	Fl A
4304d		Orchids,	Orchidaceae	Fl A
4304e		Pansies, Viola x wittrockiana	Violaceae	Fl A
4304f	62¥	Carnations, Dianthus caryophyllus	Caryophyllaceae	Fl A
4305		Sheet of 10, #4305c,f, 2 each of #4305a, b, d, e		
4305a		Poppies, Papaver orientale	Papaveraceae	Fl A
4305b		Unidentified		Fl A
4305c		Clover, Trifolium pratense	Fabaceae	Fl A
4305d		Rose, Rosa x hybrida	Rosaceae	Fl A
4305e		Hydrangea, Hydrangea macrophylla	Hydrangeaceae	Fl A
4305f	82¥	Dahlia, <i>Dahlia x hybrida</i>	Asteraceae	Fl A
		2019 July 23 (Set/10)		
4309		Sheet of 10, #4309c,f, 2 each of #4309a, b, d, e		

JAPAN (co	ntinuea	4)		
4309b		Potted morning glories, <i>Ipomoea nil</i>	Convolvulaceae	Fl A
4309c	62¥		Cucurbitaceae	Fl Fr A
4310	024	Sheet of 10, #4310c,f, 2 each of #4310a, b, d, e	Cucuibitaceae	HHA
4310c	82¥		Astorogogo	
43100	02∓	•	Asteraceae	
		2019 August 20 (Set/6)		
4313		Hybrid cherry blossoms, Prunus serrulata	Rosaceae	Fl A
4314		Plum blossoms, <i>Prunus mume</i>	Rosaceae	Fl A
4315	94¥	Violets, Viola sp.	Violaceae	Fl A
		2019 August 23 (Autumn Gree	etings) (Set/20)	
4325		Sheet of 10		
4325a		Squirrel and acorn, Quercus sp.	Fagaceae	Fr B MS
4325b	63¥	Walnut, Juglans regia	Fagaceae	Fr A MS
4325c	63¥	Pine cone, <i>Pinus sp</i> .	Pinaceae	Fr A MS
4325d	63¥	Bird, walnut & pinecone, Juglans regia; Pinus sp.	Fagaceae; Pinaceae	eFr A MS
4325e	63¥	Fir cones, Abies sp.	Pinaceae	Fr A MS
4325f	63¥	Pine cones, <i>Pinus sp</i> .	Pinaceae	Fr A MS
4325g	63¥	Yew aril and pine cone, Taxus sp.; Pinus sp.	Taxaceae; Pinaceae	eFr A MS
4325h	63¥	Squirrel and pine cone, <i>Pinus sp</i> .	Pinaceae	Fr A MS
4325i	63¥	Bird and acorn, Quercus sp.	Fagaceae	Fr B MS
4325j	63¥	Cedar rose pine cones, Cedrus deodara	Pinaceae	Fr A MS
4326		Sheet of 10		
4326a	84¥	Mushrooms		
4326b	84¥	Cardinal and apple, Malus domestica	Rosaceae	Fr A MS
4326c	84¥	Flowers	F	1 A U MS
4326d	84¥	Grapes and melon, Vitis vinifera; Cucumis melo	Vitaceae; Cucurbitaceae	Fr A MS
4326e	84¥	Autumn leaves and berries		r V A MS
4326f	84¥	Squirrel, squash and berries, Cucurbita pepo	Cucurbitaceae	Fr B MS
4326g	84¥		Apiaceae; Cucurbitaceae	Fr A MS
4326h	84¥	Apples, flowers & pumpkin, Malus domestica; Cucurbita pep		
4326i	84¥	Mouse and beet, <i>Beta vulgaris</i>	Amaranthaceae	V N MS
4326j		Mouse and pumpkin, Cucurbita pepo	Cucurbitaceae	Fr B MS
		2019 September 20 (Paintings) (Set/10)	
4334i	84¥	"Clematis" by Chikuma Suzuki, <i>Clematis sp.</i>	Ranunculaceae	Fl A MS
		2019 October 9 (Letter writing week, 1	Paintings by Hiroshige) (Set/6)
4342	70¥	"Flowering Apple Tree with Small Birds", Malus domestica		Fl A
4343	70¥	"Flowering Apple Tree with Small Birds", Malus domestica		Fl B
1217		2019 October 15 (150y Diplomatic rel Sheet of 10	ations with Hungary) (Se	et/10)
4347	0 1 V		Astarasasa	ELA MC
4347		Chamomile flowers, <i>Matricaria chamomilla</i>	Asteraceae	Fl A MS
4347	8 4 ≢	Cherry blossoms, Prunus serrulata	Rosaceae	Fl A MS
42.51		2019 October 23 (Set/20)		
4351	(2V	Sheet of 10	Dimagas	F A
4351b	63¥	Nuts and pine cone, <i>Pinus sp.</i>	Pinaceae	Fr A
4351e	63¥	Moss covered rocks		VBU
4351f		Leaves		VAU
4351h		Leaves and bears	D.	VBU
4351i	63¥	Pinecone detail, <i>Pinus sp.</i>	Pinaceae	Fr A

JAPAN	(continued			
4352	`	Sheet of 10		
4352a	84¥	Acorns, nuts and seeds, <i>Quercus sp</i> .	Fagaceae	Fr A
4352b	84¥	Pine needles, Pinus sp.	Pinaceae	V A
4352c	84¥	Flowers		Fl A U
4352f	84¥	Leaves		V A U
4352h	84¥	Tree rings		T A U
		2019 November 1 (Lunar New Year, Year	of the Rat) (Set/	4)
4356	84 + 3¥	Rat and radish, Raphanus raphanistrum subsp. sativus	Brassicaceae	V A
		2019 November 6 (Set/20)		
4357		Sheet of 10		
4357a	63¥	Plant		
4357d	63¥	Pine branches, <i>Pinus sp</i> .	Pinaceae	V A
4358		Sheet of 10		
4358a	84¥	Plum blossoms, <i>Prunus mume</i>	Rosaceae	Fl A
4358c	84¥	Carrot slices, Daucus carota	Apiaceae	V A
4358h	84¥	Pine needles, <i>Pinus sp</i> .	Pinaceae	V A
JORDA	N	2019 November 28 (Olive picking) (MS/4)	
2423		Olive trees and pickers, Olea europaea	Oleaceae	Fr T A MS Z
KAZAK	HSTAN	2019 December 31 (Aquatic flowe	ers) SS/2	
905		Sheet of 2		
905a	310te	Waterlily, Nymphaea alba	Nymphaeaceae	
905b	310te	Lotus, Nelumbo nucifera (=caspica)	Nelumbonacea	e Fl A SS
KYRGY	ZSTAN	2019 October 12 (Poppies) (Set/3)		
609	46s	Oriental poppy, Papaver orientale	Papaveraceae	Fl A
610	76s	Field poppy, Papaver rhoeas	Papaveraceae	Fl A
611	98s	Roemeria refracta	Papaveraceae	Fl A
611a		Sheet of 3		
		2019 November 23 (Flora) (Set/3)		
614	36s	Semenov's fir, Abies sibirica subsp. semenovii (=A. semenovii)	Pinaceae	Fr A
615	76s	Snow lotus, Saussurea laniceps	Asteraceae	Fl A
616	98s	Tulipa zenaidae	Liliaceae	Fl A
KOREA	, SOUTH	2019 August 29 (National Parks in	Korea and Croa	tia) (Pair)
2558a	380w	Seroalsan Nat. Park, S. Korea, Pinus pumila	Pinaceae	Fl B
2558b	380w	N. Velebit Nat. Park, Croatia, Dianthus carthusianorum (=veleb	iticus) Caryophy	llaceae Fl B
LEBAN	ON	2019 March 20 (Mother's Day) (Se	et/20)	
803		Stylized flowers in different colors, sheet/20	,	Fl A S
LIBERL	A	2018 December 31 (Meleguetta Pe	eppers) (Set/4; SS	5/1)
3306		Sheet of 4	/ / / / / / / / / / / / / / / / / /	,
В3306а	\$100	Seeds, Aframomum melegueta	Zingiberaceae	Fr A MS
3306b	\$200	Flower bud, Aframomum melegueta	Zingiberaceae	Fl A MS
3306c	\$300	Flower, Aframomum melegueta	Zingiberaceae	Fl A MS
3306d	\$400	Fruits, Aframomum melegueta	Zingiberaceae	Fr A MS
3307	\$500	Flower, Aframomum melegueta	Zingiberaceae	Fl A SS

LUXEMB		2019 December 3 (Grand Duchess Charlot		, · ,
1352	80c	Passion flower, <i>Passiflora sp.</i>	Passifloraceae	Fl B SS Z
MACAO		2019 June 3 (Macao Lotus Cultiva	ars) Strip/3; SS/1	
1556		Strip of 3		
1556a		Lotus, Nelumbo nucifera 'Haojiang Hong'	Nelumbonaceae	Fl A
1556b		Lotus, Nelumbo nucifera 'Haojiang Yue'	Nelumbonaceae Nelumbonaceae	Fl A Fl A
1556c 1557	5.50p	Lotus, <i>Nelumbo nucifera</i> 'Haojiang Bi bo' Lotus, Nelumbo nucifera 'Haojiang Qing'	Nelumbonaceae	FI A SS Z
1337	•			TIASSL
1585		2019 December 20 (Macao Special Administrative Region 20y)	(Block/4; SS/1) Nelumbonaceae	Fl A SS Z
	•	Lotus, Nelumbo nucifera		FIA SS Z
MALAYS		2019 June 19 (Sour Fruits) (Set/3;	· · · · · · · · · · · · · · · · · · ·	F. 4
1820		Eleiodoxa conferta	Arecaceae	Fr A
1821 1822	60c	Mangifera pajang False mangosteen, Garcinia xanthochymus	Anacardiaceae Clusiaceae	Fr A Fr A
1823	60c \$3	Tamarind, Tamarindus indica	Fabaceae	Fr A SS Z
				1171 55 2
MALDIV		(, · · · /	ELA MC
3822a 3822b	20r 20r	Singapore graveyard flower, <i>Plumeria obtusa</i> (=apiculata)	Apocynaceae Convolvulaceae	Fl A MS Fl A MS
3822c	20r	Cypress vine, <i>Ipomoea quamoclit</i> Arabian jasmine, <i>Jasminum sambac</i>	Oleaceae	FI A MS
3822d	20r	Sea hibiscus, <i>Hibiscus tiliaceus</i>	Malvaceae	Fl A MS
3832		Hibiscus, Hibiscus rosa-sinensis	Malvaceae	Fl A SS
3899d	20r	2017 May 17 (Paintings by Claude "Agapanthus" 1914-1926, <i>Agapanthus africana</i>	Amaryllidaceae	Fl A MS
30))4	201		2	
3903c	20r	2017, May 17 (Paintings by Mary "Lilacs in a Window", <i>Syringa vulgarris</i>	Cassatt) (Set/4; SS/ Oleaceae	Fl A MS
39030	201	· • • • • • • • • • • • • • • • • • • •		TI A MIS
20041	20	2017 May 17 (Paintings by Van G	• / /	E1 4 3 4 C
3904b	20r	"Sunflowers", Helianthus annuus	Asteraceae	FI A MS
3914	70r	"Still Life: Vase with Fifteen Sunflowers", Helianthus annuus	Asteraceae	Fl A SS Z
MARSHA	LL ISL	8 (21	, , , , , ,	F1 + 3.60
1250	Φ.	Sheet of 4 a-d <i>Plumeria alba</i>	Apocynaceae	FI A MS
1251	22	Plumeria alba	Apocynaceae	Fl A SS
		2019 August 19 (Morning Glories	, , , , , , , , , , , , , , , , , , , ,	
1252	Φ.5	Sheet of 4 a-d, <i>Ipomoea purpurea</i>	Convolvulaceae	FI A MS
1253	\$5	Ipomoea purpurea	Convolvulaceae	Fl A SS
MEXICO		2019 December 6 (Christmas) (Se	*	
3154	7p	Poinsettia and airmail envelopes, Euphorbia pulcherrima	Euphorbiaceae	Fl B
MONGO	LIA	2019 November 18 (Landscapes type of 2018, see Vo	ol. 68 (1) p.23) (Set	77)
2921	1300t	Cymbaria dahurica	Orobanchaceae	Fl B
2922	1300t	Saxaul, Haloxylon ammodendron	Amaranthaceae	Fl B
2923	1300t	8	Amaryllidaceae	Fl B
2924	1300t	Thymus gobicus	Lamiaceae	Fl B
2925	1300t	Scots pine, Pinus sylvestris	Pinaceae	Fl B
2926	1300t	Long-stemmed almond, Prunus (=Amygdalus) pedunculata	Rosaceae	Fl B
2927	1300t	Spotted arnebia, Arnebia guttata	Boraginaceae	Fl B

MOROC	CO	2009 December (Flowers) (Set/10))	
1034A		Booklet pane of 10		
1034Ab	3.25d	Pyrus mamorensis	Rosaceae	Fl A
1034Ac	3.25d	Tulipa sylvestris	Liliaceae	Fl A
1034Ad	3.25d	Cleonia lusitanica	Lamiaceae	Fl A
1034Ae	3.25d	Thymus broussonetii	Lamiaceae	Fl A
1034Af	3.25d	Milk thistle, Silybum marianum	Asteraceae	Fl A
1034Ag	3.25d	Cynara humilis	Asteraceae	Fl A
1034Ah	3.25d	Phlomis crinita ssp. mauritanica	Lamiaceae	Fl A
1034Ai	3.25d	Verbascum pseudocreticum	Scrophulariaceae	Fl A
1034Aj	3.25d	Campanula afra	Campanulaceae	Fl A
1034Ak	3.25d	Butterfly orchid, Orchis papilionacea	Orchidaceae	Fl A
NORFOL				
1148	\$1	Curled frond, Cyathea brownii	Cyatheaceae	V A
1149	\$2	Open frond, Cyathea brownii	Cyatheaceae	V A
1149a		Souvenir sheet of 2		V A SS
PANAMA	\	2019 June 7 (Fruit and Nuts) (Set/	14)	
1009	25c	Soursop, Annona muricata	Annonaceae	Fr A
1009a		Booklet pane of 6		Fr A
1010	25c		; H. ocamponis Cact	
1010a		Booklet pane of 6		Fr A
1011	25c	Cashew, Anacardium occidentale	Anacardiaceae	Fr A
1011a		Booklet pane of 6		Fr A
1012	25c	Ice-dream bean tree, Inga feuilleei	Fabaceae	Fr A
1012a		Booklet pane of 6		Fr A
1013	25c	Coyol palm, Acrocomia aculeata	Arecaceae	Fr A
1013a		Booklet pane of 6	~	Fr A
1014	25c	Mammee, Mammea americana	Calophyllaceae	Fr A
1014a		Booklet pane of 6	a .	Fr A
1015	25c	Papaya, Carica papaya	Caricaceae	Fr A
1015a		Booklet pane of 6		Fr A
1016	1b	Soursop, Annona muricata	Annonaceae	Fr A
1017	2b	Strawberry pear; dragon fruit, Hylocereus trigonus (=triangularis)		
1018	3b	Cashew, Anacardium occidentale	Anacardiaceae	Fr A
1019	4b	Ice-dream bean tree, <i>Inga feuilleei</i>	Fabaceae	Fr A
1020	5b	Coyol palm, Acrocomia aculeata	Arecaceae	Fr A
1021	10b	Mammee, Mammea americana	Calophyllaceae	Fr A
1022	15b	Papaya, Carica papaya	Caricaceae	Fr A
PITCAIR	N ISLA	1 ()()		
858	Φ.	Sheet of 4	T :1:	E1 4 3 40
858a	\$1	Easter lily, Lilium longiflorum	Liliaceae	Fl A MS
858b	\$1.80	Brazil's white angel trumpet, Brugmansia suaveolens	Solanaceae	Fl A MS
858c	\$2.80	Queen of the night, Epiphyllum oxypetalum	Cactaceae	Fl A MS

PITCAIRN	J IST.A	NDS (continued)		
858d		Night-blooming jasmine, Cestrum nocturnum	Solanaceae	Fl A MS
SERBIA		2019 November 7 (Set/2)		
882	40d	Showy stonecrop, ice plant, <i>Hylotelephium spectabile</i>	Crassulaceae	Fl A
TUVALU		2019 August 12 (Pacific Islands I	eaders Meeting) (S	et/4)
1451c	\$2.50	Local fruit	bedders wreeting) (B	Fr S U MS
UNITED S	TATES	2020 February 21 (Wild orchids) (Set/10	· Coil SA die cut 10	3/4 vert)
5435	(55c)	Large purple-fringed orchid, Platanthera grandiflora	Orchidaceae	Fl A
5436	(55c)	Terrestrial cowhorn, Cyrtopodium flavum (=polyphyllum)	Orchidaceae	Fl A
5437	(55c)	Common grass pink orchid, Calopogon tuberosus	Orchidaceae	Fl A
5438	(55c)	Fragrant ladies tresses, Spiranthes odorata	Orchidaceae	Fl A
5439	(55c)	Three-birds orchid, Triphora trianthophora	Orchidaceae	Fl A
5440	(55c)	California lady's-slipper, Cypripedium californicum	Orchidaceae	Fl A
5441	(55c)	Crested coralroot, Hexalectris spicata	Orchidaceae	Fl A
5442	(55c)	Showy lady's-slipper, Cypripedium reginae	Orchidaceae	Fl A
5443	(55c)	Eastern prairie fringed orchid, Platanthera leucophaea	Orchidaceae	Fl A
5444	(55c)	Three-birds orchid, Triphora trianthophora	Orchidaceae	Fl A
5444a	(330)	Horiz strip of 10 #5435-5444	Oremdaceae	1171
3 -1-1 a		P# strip of 10, #B1111		
		P# strip of 17 #54353-37 2 each of #5438-5444, #B1111		
		P# single (#5443) #B1111		
		2020 February 21 (Wild orchids) (Set/10		
5445	(55c)	Three-birds orchid, <i>Triphora trianthophora</i>	Orchidaceae	Fl A
5446	(55c)	California lady's-slipper, Cypripedium californicum	Orchidaceae	Fl A
5447	(55c)	Crested coralroot, Hexalectris spicata	Orchidaceae	Fl A
5448	(55c)	Showy lady's-slipper, Cypripedium reginae	Orchidaceae	Fl A
5449	(55c)	Fragrant ladies tresses, Spiranthes odorata	Orchidaceae	Fl A
5450	(55c)	Eastern prairie fringed orchid, <i>Platanthera leucophaea</i>	Orchidaceae	Fl A
5451	(55c)	Three-birds orchid, Triphora trianthophora	Orchidaceae	Fl A
5452	(55c)	Large purple-fringed orchid, Platanthera grandiflora	Orchidaceae	Fl A
5453	(55c)	Terrestrial cowhorn, Cyrtopodium flavum (=polyphyllum)	Orchidaceae	Fl A
5454	(55c)	Common grass pink orchid, Calopogon tuberosus	Orchidaceae	Fl A
5454a		Block of 10 #5445-5454		
5454b		Bklt pane of 20, 2 each #5445-5454		
		2020 April 2 (Corsage and Bouto	nniere) (Set/2)	
5457	(55c)	Boutonniere, Cymbidium sp.; Echevaria sp.; Hydrangea sp.; L		
5157	(330)	Orchidaceae; Crassulaceae; Hydrangea	*	FIVA
5458	70c	Corsage, Rosa sp.; Ranunculus sp.; Erica sp.; Eucalyptus sp.	iceae, Hispanagaceae	11 7 21
2 120	700	Rosaceae; Ranunculaceae; J	Ericaceae: Myrtacea	ne FlVA
			, ,	
VIRGIN IS			/ \	,
1201		Golden trumpet, Alamanda cathartica	Apocynaceae	Fl A
1202	40c	Hibiscus, Hibiscus rosa-sinensis	Malvaceae	Fl A
1203	50c	Oleander, Nerium oleander	Apocynaceae	Fl A
1204	60c	Frangipani, <i>Plumeria alba</i>	Apocynaceae	Fl A
1205	75c	White cedar, Thuja occidentalis	Cupressaceae	Fl A
1206	\$2	Bougainvillea, Bougainvillea spectabilis	Nyctaginaceae	Fl A
1207	\$5	Flamboyant, <i>Delonix regia</i>	Fabaceae	Fl A

New Plants in the Philatelic Herbarium

By Christopher E. Dahle, BU 1269

Begonia angularis BEGONIACEAE

Synonyms: B. angularis var. angularis, B. compta, B. crenulata, B. hastata, Pritzella zebrina

Perennial terrestrial subshrub to 1 m, glabrous, erect, slightly branched, reddish stems. Leaves ovate to oblong cordate, denticulate on edges. Flowers white, 1 cm, on long erect peduncles. Shady, humid locations. Endemic to Brazil from Bahia south to Paraná.



Brazil Scott # 3361a. Issued 22 Sept. 2017, Flora of the Atlantic Forest. Designed by Camila Sena Hott. Printed in offset by Casa da Moeda do Brasil, Rio de Janiero. Quantity printed: 480,000 scented minisheets of 4 on gummed paper and 960,000 panes of 24 on selfadhesive paper

Anthurium lucioi ARACEAE

Terrestrial herb. Leaves simple, lanceolate 5-55 cm. Spathe yellow-green. Occurs in high mountain forests of the Atlantic coast in Minas Gerais, Espírito Santo and São Paulo states. Endemic to Brazil.

Brazil Scott 3316b. Issued 22 Sept. 2017. Flora of the Atlantic Coast.

Tabebuia roseoalba BIGNONIACEAE

Common name: White Ipê Synonyms: 17 synonyms

Decidouous tree 7-16 m. Leaves compund with 3 leaflets 6-13 cm. Flowers white, borne in clusters Grows in dense primary forest and secondary formations in rocky and limestone areas of seasonal dry forest biomes. Used for timber and as an ornamental. Found in Paraguay, Brazil, Bolivia, Peru and Colombia.



Brazil Scott #3361c. Issued 22 Sept. 2017. Flora of the Atlantic Coast.

Cereus brookii CACTACEAE

Common name: Apple cactus Synonyms: Harrisia brookii

Climber to 5 m, much branched, light green, 10 ribbed. Areoles 2 cm apart with 9-12 spines 2-2.5 cm. Flowers white, funnel-shaped, 20 cm, open at night. Fruit elipsoid or globose, 8 cm diameter, yellow. Distribution: endemic to Eleuthera and Long Island, Bahamas.



Bahamas Scott#1491. Issued 5 Sept. 2019 in a set of 16 definitives featuring Native Flora. Photographs by Dr. Ethan Freid. Designed by Bee Design. Printed by Cartor Secuity Printer using Stochastic Lithography.

Agave inaguensis ASPARAGACEAE

Acaulescent semi-succulent shrub. Leaves form basal rosette, grayish green to 1 m long 12 cm wide. Flowers in terminal panicle 5 m high are yellow. Grows on sandy substrate near shorelines and off-shore keys. Endemic to southern islands of the Bahamas.

Bahamas Scott# 1492. Issued 5 Sept. 2019. Native Flora defintives.





Euphorbia gymnonota EUPHORBIACEAE

Common name: Bahamas bush spurge

Synonyms: Adenorima gymnonota, Euphorbiodendron gynonotum Perennial shrub, 3 m with fleshy branches. Leaves alternate linear-oblanceolate, 4-8x0.8-1.4 cm, entire. Inflorescence 5-7 flowered, terminal with crimson ovate bracts. Thickets and open coppices on rocky flats and slopes in the central and southeastern islands.

Bahamas Scott #1493 Issued 5 Sept. 2019. Native Flora definitives.



Euphorbia longinsulicola EUPHORBIACEAE

Synonyms: Chamaesyce longinsulicola

Low shrub to 1m. Leaves succulent, opposite, siler-gray, rounded margins. Flowers, in axils of leaves, arranged in cyathia, with no calyx or corolla. Dark brown or red glands occur on the edge of the cyathia. Grow in dunes along Atlantic coastline of Long Island.

Bahamas Scott #1494. Issued 5 Sept. 2019. Native Flora definitives.

Encyclia fehlingii

ORCHIDACEAE

Synonyms: Epidendrum fehlingii

Epiphytic herb with pseudobulb to 9 cm. Leaves, 1-3, linear, to 50 cm long. Flowers on panicles to 70 cm bearing up to 50 blossoms, greenish yellow, to 3 cm diameter. Grow in dry evergreen forests and mangroves on northern islands of the Bahamas.

25c Surle Bahamas

Bahamas Scott #1495. Issued 5 Sept. 2019. Native Flora definitives.

Lepidaploa arbuscula ASTERACEAE

Common name: Lavender iron shrub

Synonyms: Cacalia bahamensis, Vernonia arbuscula, V. arctata, V. bahamensis, V. obcordata

Perennial shrub to 1 m. Leaves silvery green, alternate. Flowers, purple, at ends of branches in showy clusters. Endemic to Bahamian archipelago. Found in open rocky pinelands of northwestern and southeastern islands.



Bahamas Scott #1497. Issued 5 Sept. 2019. Native Flora defintives.



Galactia bahamensis FABACEAE

Common name: Bahama milk pea

Woody climbing vine to 2 m. Leaves, trifoliate, 3 cm leaflets, oval. Flowers arranged in racemes. Corolla rose-purple. Grows along edges of dry broadleaf evergreen scrubland and dwarf shrubland near the shore. Endemic to Bahamas. Occurs in south central and sousthern islands.

Bahamas Scott #1499. Issued 5 Sept. 2019. Native Flora definitives.



Cyperus correllii

CYPERACEAE

Synonyms: Torulinium correllii

Perennial rhizomatous herb 20-30 cm. Leaves linear 15-25 cm long 5-8 mm wide. Umbeliferous inflorescence 10 cm with head 4-7 cm wide bearing 6-8 spikes, glumes brownish red to reddish-purple. Grows in coastal dunes of the Bootle Bay and West End area of Grand Bahama in the marin intertidal zone.

Bahamas Scott # 1501. Issued 5 Sept. 2019. Native Flora definitives.



Ernodea gigantea RUBIACEAE

Common names: Crooked Island golden creeper

Shrub 1-2 m. Leaves leathery eliptic to lanceolate. Flowers tubular, white axillary. Fruit orange. Grow in coppice thickets on Acklin, Crooked Island and Mayaguana.

Bahamas Scott #1502. Issued 5 Sept. 2019. Native Flora definitives.



Symphyotrichum lucayanum ASTERACEAE

Common name: Pineland aster

Synonyms: Aster lucayanus, Virgulus lucayanus

Unbranched woody perennial to 50 cm. Leaves hirsute, linear, sessile, opposite 8 cm long 2 cm wide, margin entire. Flowers on raceme. Found in pine woodlands and endemic to Grand Bahama.

Bahamas Scott #1503. Issued 5 Sept. 2019. Native Flora definitives



Gochnatia paucifloscula ASTERACEAE

Common name: Carajo bush

Synonyms: Anastraphia bahamensis, A. cunefolia, A.paucifloscula, A.

pauciflosculosa, Gochnatia bahamensis

Shrub to 3 m. Leaves altermnate, 3 cm, spiny revolute margin. Flower heads with 6-12 flowers. Endemic to central and southern islands.

Bahamas Scott #1504. Issued 5 Sept. 2019. Native Flora definitives.

Nashia inaguensis

VERBENACEAE

Common names: Moujean tea, Bahamas berry

Synonyms: Lippia inaguensis

Evergreen shrub 2-3 m. Leaves aromatic, simple, opposite, elliptic to ovate 5-10 mm, glossy with revolute margins. Stems and leaves covered with hairs. Flowers axillary, in clusters, corolla whitish 2 mm. Red-orange berries. Leaves used for tea. Found in Dry Broadleaf Evergreen Formation habitat. Occurs in southern islands of Bahamas, also Puerto Rico and Virgin Islands.



Bahamas Scott #1505. Issued 5 Sept. 2019. Native Flora definitives.

Epidendrum jamiesonis

ORCHIDACEAE

Common name: Orquidea maigua Synonyms: Epidendrum evectum

Terrestrial or epiphytic herb to 1 m. Leaves succulent Blooms all year. Terminal inflorescence producing many flowers. Flower 1 cm, lilac. Cool or cold growing. Natural hybrid. Distribution Colombia, Peru and Eciudor, 1700-3500 m.

CORREDS DEL ECUADORI 5 desta desta companiente de la companiente del companiente de la companiente de la companiente de la companiente del companiente de la companiente de la

Ecuador Scott #2225d. Issued 27 December 2018 for the 50th anniversary of the Cotacachi-Cayapas Ecological Reserve

Faujasia squamosa

ASTERACEAE

Common name: Faujasie écalilleuse Synonyms: Conyza squamosa

Bushy sub-shrub to 1 m. Leaves sessile, oblong-elliptical 2-3.5 cm by 0.6-0.8 cm, serrated. Flowers yellow, in short terminal cymes. Grows in wet rocky areas or cliffsides among ericoid altimontane

vegetation. Found only in Piton de Nieges National Park on Reunion island above 1900 m.

France Scott # 5658b. Issued 17 May 2019 fin a set of 4 showing endangered flora. Designed by Florence Cendre form phographs by Jéremie Van Es. Printed in Quadricchromie heliogravure in sheets of 42. Quantity printed: 900,000 stamps, 330,000 souvenir sheets

Bulbophyllum auricomum



ORCHIDACEAE

Common naem: Golden haired bulbophyllum Synonyms: *Bulbophyllum foenisecii*, *B. tripetaloides*, *Dendrobium tripetaloides*, *Phyllorchis auricoma*, *Phyllorkis auricoma*

Small epiphyte leass than 15 cm. Pseudodbulbs with deciduous leaves 10 cm, often not present at blooming. Numerous white fragrant flowers on 22 cm inflorescence in late fall early winter. Lowland seasonal forests in Thailand, Myanmar, Sumatra and Java.

Burma (Myanmar) Scott #451. Issued 27 Nov. 2019 in the series on monthly festivals for the Myanmar literature festival. Designed by Wai Zin Paing. Printed by offset at Security Printing Works (Myanmar) in 4 colors in sheets of 30 in a quantity of 150.000.

Leea indica VITACEAE

Commonn name: Bandicoot berry

Synonyms: 30 Synonyms

Erect shrub or small tree 2-10 m. Leaves double or triple compound, 90-120 cm long. Flowers greenish white. Undisturbed or slightly disturbed sites in mixed dipterocarp, swamp and sub-montane forests to 1200 m. From Southern China, India through tropical Asia to Australia and SW Pacific. Cultivated for food and medicinal purposes.

Indonesia Scott #2453c, g. Issued 5 Nov. 2016 in a minisheet of 6 titled Flora and Fauna showing flowers and butterflies.



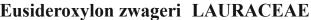
Koompassia excelsa FABACEAE

Common name: Sialang

Synonyms: Abauria excelsa, Koompassia parviflora

Emergent triopical rainforest tree to 75 m with large butress roots. Deciduous leaves 7-12 foliate. Leaflets eliptic oblong 3.1-3.7 by 1-1.4 cm. Inflorescence to 11 cm densely flowered, with white blossoms 2.5 cm diameter. Fruit 108 mm, orangered in flattened pods. Found in alluvial sites and hillsides, often on limestone, to 300 m. Seeds used as food. Harvested for timber.

Indonesia Scott #2490d. Issued 5 Nov. 22018 in a block of 6 depicting Flora and Fauna.



Common names: Borneo ironwood, billian

Synonyms: Eusideroxylon borneense, Salgada lauriflora

Tree to 50 m evergreen. Leaves simple, elliptical to ovate 14-18 cm long 5-11 cm wide. Flowers yellow to greenish or white. Fruit is toxic. Primary forest lowlands of Borneo, Indonesia and the Philippines at elevations to 400 m. Used as timber. Extremely dense wood does not float.

Indonesia Scott #2490e. Issued 5 Nov. 2018 in block of 6.







Agathis borneensis ARAUCARIACEAE

Common name: Borneo Kauri, damar

Synonyms: A. beccarii, A. beckingii, A. endertii, A. latifolia, A. macrostachys, A. rhombiodalis

Tree to 55 m. Leaves evergreen, 6-12 cm by 20-35 mm, light green. Pollen cones oblong, 4-7 cm by 20-25 mm; seed cones 6-8.5 cm by 5.5-6.5 cm. Seeds are 12 by 9 mm, winged. Tropical rainforests to 2,400 m in SUmatra, peninsular Malaysia and Borneo. Used as timber. Resin used in varnish.

Indonesia Scott # 2490f. Issued 5 Nov. 2018 in block of 6.



Melissa officinalis LAMIACEAE

Common name: Lemon balm Synonyms: 11 synonyms

Bushy herbaceous perennial 45-60 cm. Aromatic leaves wrinkled, ovate to 8 cm long paired on square stems. Blooms in summer with white to pale yellow flowers. Native to Southern Europe. Leaves edible, also used in sachets. Variety

of medicinal uses.

Iran Scott #3184. Issued in 2017

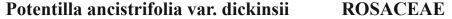
Pancratium sickenbergeri

AMARYLLIDACEAE

Common name: Desert pancratium

Synonyms: *P. sickenbergeri* var. *desertorum*, *P. sickenbergeri* var. *littorale* Herbaceous desert ephemeral to 20 cm. Leaves form a rosette from a bulb appearing after flowering. Flowers, white, in September and October. Found growing in sand in Egypt and Israel.

Israel Scott #2236. Issued 18 Sept. 2019 in a series of 3 titled Autumn Flowers. Designed by Tuvia Kurtz and Ronen Goldberg. Printed in offset by Cartor Security Printing, France



Synonyms: Potentilla dickinsii

Herbaceous perennial to 5 cm. Leaves basal, glossy green deeply veined, trifoliate. Flowers golden yellow in June-September. Forests, meadows, ravines, rock crevices on mountain slopes 200--2700 m in China, Japan and Korea.

Japan Scott #4283h. Issued 12 April 2019 in a sheet of 12 Flora and Fauna of Kurobe Gorge.



Hylotelephium spectabile CRASSULACEAE

Common names: Showy stonecrop, ice plant, Butterfly stonecrop Synonyms: *Hylotelephium spectabile* var. *spectabile*, *Sedum telephium* var. *kirinense*

Succulent perrennial, erect unbranched stems to 50 cm. Leaves oval, 8 cm by 5 cm, dull green to blue-green. Pink star-shaped flowers in late summer borne in terminal clusters 15 cm across. Native to China and Korea, grown horticulturaly.

Serbia Scott #882. Issued 7 Nov. 2019 in a set of 2. Designed by Nadežda Skočajić. Printed by offset in sheets of 100 on Muflep 100 gr/m² gummed paper in a quantitiy of 200,000.







FUNGI

Editor

Dr. Paul A. Mistretta, BU 1681

New Listings



Scott# Denom Common Name/Scientific Name Family/Subfamily 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.]

JAPA	N	2019 May 24 (Mushrooms) (Sheet/10)			
4290		Sheet of 10			
4290g	82y	Children gathering mushrooms, forming a unified design (family	y picnic) N/A	B G U	
2019 August 23 (Mushrooms) (Sheet/10)					
4326a	84y	Drawings of 3 mushrooms (generic)	N/A	A G U	
		2019 October 23 (Mushrooms) (Sheet/10)			
4351		Sheet of 10 different self-adhesive stamps			
4351a	63y		N/A	A G U	
4352	J	Sheet of 10 different self-adhesive stamps			
4352g	84y	3 stylized mushrooms (<i>Amanita caesarea</i> ?)	[[Amanitaceae]	A G	
KAZA	KHSTAN	2019 December 10 (Mushrooms) (MS/6)			
900a	B (280te)	White Lactarius, <i>Lactarius resimus</i>	Russulaceae	A	
900b	B (280te)	[no common name], Morchella picola	Morchellaceae	A	
900c	B (280te)	Golden chanterelle, girolle, Cantharellus cibarius	Cantharellaceae	A	
900d	B (280te)	Foxy bolete, <i>Leccinum vulpinum</i>	Boletaceae	A	
900e	B (280te)	Scotch bonnet, +, Marasmius oreades	Marasmiaceae	A	
900f	B (280te)	Penny bun, Boletus edulis	Boletaceae	A	
KYRG	YSTAN (K	YRGYZ EXPRESS POST) 2019 March 14 (Poisonous	Mushrooms) (MS/4,	SS/4)	
106	50s	Ivory funnel, sweating mushroom, Clitocybe dealbata (\$)	Tricholomataceae	M	
107	75s	Yellow staining mushroom, yellow stainer, Agaricus xanthodern	nus (🔻) Agaricaceae	M	
108	100s	, 1	ulare (🎗) Strophariace	eae M	
109	150s	Deadly daperling, <i>Lepiota brunneoincarnata</i> (\$)	Agaricaceae	M	
109a		Souvenir sheet of 4, 1 each #106-109	as above	M	
MACA	O	2019 June 7 (Mushrooms)			
1554b	3p	Listed in Linn's, I have not seen it, but suspect this to be a minor	r design element	(?B U)	
MALD	IVE ISLA	NDS 2017 March 16 (Mushrooms & Owls) (Set	/4, SS/1)		
3825a	22r	Common morel, yellow morel, true morel, sponge morel, Morch	ella esculenta Morche	llaceaeM	
3825b	22r	Crown of thorns mush, drunken mus, Psilocybe zapotecoru		M	
3825c		Death cap, <i>Amanita phalloides</i> (♣)	Amanitaceae	M	
3825d		Dark honey fungus, Armillaria ostoyae	Physalacriaceae	M	
3835	70r	Torq, banded agaric, spring agaric, +, Agaricus bitorquis	Agaricaceae	M	

Lichens

BELARUS		2019 June 7 (Lichens) (Set/3, SS/6)		
1142	A (48k)	Common orange lichen, yellow scale, +, Xanthoria parietina	Teloschistacaceae	L
1143	M (1.56r)	Tree lungwort, lung lichen, +, Lobaria pulmonaria	Lobariaceae	L
1144	H (1.68r)	English soldiers, Cladonia floerkeana	Cladoniaceae	\mathbf{L}
1144a		Souvenir sheet of 6, 2 each of #1142-1144		

Look Alike

Look Anke				
JAPAN		2019 April 1 (Mushroom look-alike)		
3280		Sheet of 10 different self-adhesive stamps		
3280e	82y	Parasol looks like a <i>Marasmius</i> sp.	N/A	M

Coming Soon! ATA Handbook #168 – Topical Adventures

Our new book, *Topical Adventures – A Guide to Topical and Thematic Stamp Collecting*, will be the go-to reference for topical and thematic collectors and exhibitors for years to come. You may pre-order and it will be shipped to you promptly on or before Aug. 1. <u>Click here</u> to order your copy.

Written by ATA members with expertise in many areas, the book will be a useful reference on the full spectrum of topical collecting, from selecting your topic, acquiring stamps and other items, storing and displaying your collection and much more. The chapter on exhibiting has extensive information on thematic, display and topical exhibiting and is richly illustrated with exhibit pages by accomplished exhibitors. Throughout the book there are vignettes—short articles on specific topics, such as choosing paper; errors, freaks and oddities; postal stationery; cinderellas and many others. There are interviews with accomplished exhibitors and personal reflections from topical collectors: How they chose their topics and what they enjoy about topicals. Contributors to these vignettes collect everything from botanical stamps to African American heritage to wine, and pandas.

This new handbook belongs in the library of every collector and exhibitor. You'll keep it handy for ready reference and to enjoy the feature articles at your leisure.





MAMMALIA



Editor Michael Prince, LM68

New Listings

Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code	
ANDO	ORRA (Fren	2019 October 4 (Bear) (Set/2)			
813		Brown Bear, Ursus arctos	Ursidae	A	
BRAZ	BRAZIL 2019 March 21 (Signs of the Zodiac - Leo) (Set issued oveer 12 months)				
3401	NVI (1r30)	Dall's Sheep, Ovis dalli	Bovidae	Á	
		2019 April 21 (Signs of the Zodiac – Taur	115)		
3402	NVI (1r30)	Domestic Cattle, Bos taurus	Bovidae	A	
	, ,	2019 July 22 (Signs of the Zodiac - Leo)			
3405	NVI (1r30)	Lion, Panthera leo	Felidae	A	
BUL	GARIA	2019 August (Polar Explorer – Solomon A	Andree) (SS/1)		
Not lis		Polar Bear, Ursus maritimus	Ursidae	В	
		2019 October (Otter) (SS/1)			
Not lis	sted 65s	European Otter, <i>Lutra lutra</i>	Mustelidae	A	
- 10 7		e above two souvenir sheets were issued in limited quantities and			
	issi	ued with Scott numbers.			
GRE	AT BRITAIN	N (Alderney) 2020 January 21 (Sea Life) (Set/6)			
661		Grey Seal, Halichoerus grypu	Phocidae	A	
GREA	AT BRITAIN	N (Isle of Man) 2020 January 15 (New Year 2020 – Year	of the Rat) (Set/4)		
2069		Brown Rat, Rattus norvegicus	Muridae	A	
2070	£1.67	Brown Rat, Rattus norvegicus	Muridae	A	
2071		Brown Rat, Rattus norvegicus	Muridae	A	
2072	£2.85	Brown Rat, Rattus norvegicus	Muridae	A	
GREI	ENLAND	2019 June 21 (Aasivissuit-Nipisat Inuit Hu	unting Area) (Set/2)		
815	14k	Muskox, Ovibos moschatus	Bovidae	В	
		Arctic Hare, Lepus arcticus	Leporidae NEW	В	
GRE	NADA	2019 March 27 (Dolphins) (Sheet/4)			
4325a			Delphinidae	A	
4325b		Pantropical Spotted Dolphin, Stenella attenuata	Delphinidae	A	
4325c		Pantropical Spotted Dolphin, Stenella attenuata	Delphinidae	A	
4325d	\$5	Pantropical Spotted Dolphin, Stenella attenuata	Delphinidae	A	
		2019 May 24 (Deer) (Sheet/4 & SS/1)			
4334a	·	White-tailed Deer, Odocoileus virginianus	Cervidae	A	
4334b		White-tailed Deer, Odocoileus virginianus	Cervidae	A	
4334c		White-tailed Deer, Odocoileus virginianus	Cervidae	A	
4334d		White-tailed Deer, Odocoileus virginianus	Cervidae	A	
4335	\$14	White-tailed Deer, Odocoileus virginianus	Cervidae	A	

GRENADA (continued)

	· ·	2019 September 3 (Armadillo) (Sheet/3	& SS/1)	
4342a	\$4	Nine-banded Armadillo, Dasypus novemcinctus	Dasypodidae	A
4342b		Nine-banded Armadillo, Dasypus novemcinctus	Dasypodidae	Α
4342c	\$6	Nine-banded Armadillo, Dasypus novemcinctus	Dasypodidae	Α
4343	\$14	Nine-banded Armadillo, Dasypus novemcinctus	Dasypodidae	AZ
GUYAN	A	2019 May 1 (South American Wildlife) (MS/6 & Sheet/4)	
4596b	\$200	White-lipped Peccary, Tayassu pecari	Tayassuidae	Α
		White-tailed Deer, Odocoileus virginianus	Cervidae	Α
		Vicugna, Vicugna vicugna	Camelidae	Α
4596c	\$200	, , , , , , , , , , , , , , , , , , , ,	Myrmecophagidae	Α
		White-nosed Coati, Nasua narica	Procyonidae	A
45061	# 400	Six-banded Armadillo, Euphractus sexcinctus	Chlamyphoridae	A
4596d	\$400	Red Howler Monkey, Alouatta seniculus	Atelidae	A
1506-	¢400	Visored Bat, Sphaeronycteris toxophyllum	Phyllostomidae NEW	A
4596e	\$400	, , ,	Myrmecophagidae	A
4596f 4597a		Jaguar, Panthera onca	Felidae Atelidae	A
4397a 4597b	\$200	Red Howler Monkey, <i>Alouatta seniculus</i> Red Howler Monkey, <i>Alouatta seniculus</i>	Atelidae	A A
4597c	\$400	Red Howler Monkey, Alouatta seniculus	Atelidae	A
4597d	\$500	Red Howler Monkey, Alouatta seniculus	Atelidae	A
7377 u	Ψ500	• •		11
1.601	#100	2019 May 28 (Monkey) (Sheet/4 & SS/1)		
4601a	\$100	White-faced Saki, Pithecia pithecia	Pitheciidae	A
4601b	\$300	, ,	Pitheciidae	A
4601c	\$500	, <u>,</u>	Pitheciidae	A
4601d 4602	\$700	, 1	Pitheciidae	A
	\$800	White-faced Saki, Pithecia pithecia	Pitheciidae	A
HONG K		2019 July 16 (Marine Life) (Set/6)	5.11.11	-
2017	\$3.40	Indo-Pacific Humpbacked Dolphin, Sousa chinensis	Delphinidae	В
2017a		Miniature sheet of 4		
INDONE		2018 November 5 (Flora and Fauna) (Set	The state of the s	
2490b		Ursine Tree Kangaroo, Dendrolagus ursinus	Macropodidae NEW	A
2490c	3000r	Celebes Crested Macaque, Macaca nigra	Cercopithecidae	A
		2019 June 11 (China 2019 World Stamp	Exhibition) (Sheet/2)	
2506a		Giant Panda, Ailuropoda melanoleuca	Ursidae	Α
2506b	10,000r	Bornean Orangutan, Pongo pygmaeus	Hominidae	A
JAPAN		2019 April 12 (Flora and Fauna of Kurob	e Gorge) (Sheet/10)	
4283c	82y	Japanese Serow, Capricornis crispus	Bovidae	A
4283g	82y	Japanese Macaque, Macaca fuscata	Cercopithecidae	A
		2019 July 3, (Dolphins) (Set/10)		
4307	Shee	et of 10		
4307a		Pacific White-sided Dolphin, Lagenorhynchus obliquidens	Delphinidae	A
4307b	82y	Indo-Pacific Bottlenose Dolphin, Tursiops aduncus	Delphinidae	A
4307c	82y	Pacific White-sided Dolphin, Lagenorhynchus obliquidens	Delphinidae	A
4307d	82y	Pacific White-sided Dolphin, Lagenorhynchus obliquidens	Delphinidae	A
4307e	82y	Pacific White-sided Dolphin, Lagenorhynchus obliquidens	Delphinidae	A

JAPAN (Continue	d)		
4307f	82y	Indo-Pacific Bottlenose Dolphin, Tursiops aduncus	Delphinidae	A
4307g	82y	Indo-Pacific Bottlenose Dolphin, Tursiops aduncus	Delphinidae	A
4307h	82y	Pacific White-sided Dolphin, Lagenorhynchus obliquidens	Delphinidae	A
4307i	82y	Indo-Pacific Bottlenose Dolphin, Tursiops aduncus	Delphinidae	A
4307j	82y	Indo-Pacific Bottlenose Dolphin, Tursiops aduncus	Delphinidae	A
-	Margin	: Indo-Pacific Bottlenose Dolphin, <i>Tursiops aduncus</i>	Delphinidae	Α
		2019 August 23 (Autumn Greetings) (Sh	eet/10)	
4325		Sheet of 10		
4325a	63y	Japanese Squirrel, Sciurus lis	Sciuridae NEW	A
4325h	63y	Japanese Squirrel, Sciurus lis	Sciuridae NEW	В
4326		Sheet of 10		
4326f	84y	Siberian Chipmunk, Tamias sibiricus	Sciuridae	A
4326i	84y	Eastern House Mouse, Mus musculus	Muridae	В
4326j	84y	Northern Red-backed Vole, Clethrionomys rutilus	Muridae NEW	В
		October 23, 2019 (Definitives) (Sheet/10)	
4351		Sheet of 10		
4351g	63y	Racoon Dog, Nyctereutes procyoniodes	Canidae	A
4352		Sheet of 10		
4352d	84y	Eurasian Badger, Meles meles	Mustelidae	В
		Red Fox, Vulpes vulpes	Canidae	В
		Racoon Dog, Nyctereutes procyonoides	Canidae	В
4352e	84y	Siberian Chipmunk, Tamias sibiricus	Sciuridae	A
KAZAKI	HSTAN	2019 December 12 (Otter) (Set/2)		
902a	600te	European Otter, Lutra lutra	Mustelidae	A
902b	600te	European Otter, Lutra lutra	Mustelidae	Α
SENEGA	L	2017 June 5 (Zoo Animals and Boats)		
1742	300fr	Lion, Panthera leo	Felidae	
		Green Monkey, Chlorocebus sabaeus	Cercopithecidae	
SLOVEN	NIA	2019 September 27 (Bears) (Set/3 & SS	/1)	
1348	€1.17	Brown Bear, Ursus arctos	Ursidae	Α
1349	€1.31	Brown Bear, Ursus arctos	Ursidae	A
1350	€1.45	Brown Bear, Ursus arctos	Ursidae	A
1352	€1.67	Brown Bear, Ursus arctos	Ursidae	A
		2019 November 8 (Slovenians in Austra	ılia)	
1354	58c	Koala, Phascolarctos cinereus	Phascolarctidae	A
		Alpine Chamois, Rupicapra rupicapra	Bovidae	A



ORNITHOLOGY

Editor

Glenn G. Mertz, BU 1455

Corrections/Updates

Scott Publishing has assigned numbers to the following issues of Djibouti.

DJIBOUTI, Vol. 68 (4), pp.265-266 Updates:

- 12 June 2019 (Extinct species) MS/4 is 1730a,b & SS/1 is 1740
- 12 June 2019 (Hornbills) MS/4 is 1727a-d & SS/1 is 1737
- 12 June 2019 (Hummingbirds) MS/4 is1726a-d & SS/1 is 1736
- 12 June 2019 (Raptors) MS/4 is 1725a-d & SS/1 is 1735
- 27 July 2019 (Endangered Species) MS/4 is 1798b
- 27 July 2019 (Pigeons) MS/4 is 1793a-d & SS/1 is 1805
- 27 July 2019 (Owls) MS/4 is 1794a-d) & SS/1 is 1806
- 27 July 2019 (Parrots) MS/4 is 1795a-d & SS/1 is 1807
- 27 July 2019 (Samps-on-Stamps) MS/4 is 1771a (Dominica Sc#827)
- 27 July 2019 SS Blue-headed Hummingbird is 1772
- 27 July 2019 SS Green-throated Carib is 1775

New Listings

Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
AITUTAKI		2018 May 4 (Birdpex Philatelic Exhibition) (Set/2) A		
664a	\$1.00	Hawaiian Petrel, Pterodroma sandwichensis	Procellariidae	V67(2)
664b	\$4.80	Juan Fernandez Petrel, Pterodroma externa	Procellariidae	
		2018 December 27 (Birds of PreySet/1	2 with white frames)	A
669	20c	Bonelli's Eagle, Aquila fasciata	Accipitridae	
681a	20c	Same species, w/o white frame	•	
670	30c	Pearl Kite, Gampsonyx swainsonii	Accipitridae	
681b	30c	Same species, w/o white frame		
671	40c	Black-breasted Buzzard, Hamirostra melanosternon	Accipitridae	V68 (1)
681c	40c	Same species, w/o white frame		
672	50c	Brahminy Kite, Haliastur indus	Accipitridae	
681d	50c	Same species, w/o white frame		
673	\$1.00	Oriental Honey-Buzzard, Pernis ptilorhynchus	Accipitridae	
681e	\$1.00	1 ,		
674	\$2.00	Henst's Goshawk, Accipiter henstii	Accipitridae	V68(1)
681f	\$2.00	Same species, w/o white frame		
674a		SS of 6, #669-674		
675	\$2.40	Cuban Black Hawk, Buteogallus gundlachii	Accipitridae	
681g	\$2.40	Same species, w/o white frame		
676	\$2.60	, 1 0	Accipitridae	
681h	\$2.60	Same species, w/o white frame		



AITU	TAKI (conti	nued)		
677			Accipitridae	
681i	\$4.50	Same species, w/white frame		
678	\$5.00		Accipitridae	V68(1)
		Yellow-billed Kite, Milvus aegyptius (LS) ssp of Black Kite, Milv	rus migrans	Accipitridae
681j	\$5.00	Same species, w/ white frame		
679	\$7.50		Accipitridae	
681k	\$7.50	Same species, w/o white frame		
680	\$10.00		Accipitridae	
6811	\$10.00	Same species, w/white frame		
680a		SS of 6, #675-680—Note 674a & 680a have white fames on one of	or two sides	
		2019 August 5 (Scott #649, 650 & 651 surch	arged)	A
682 5	50c on \$1.70		Diomedeidae	
	50c on \$2.00	1		
	50c on \$2.40	1		
		Same species, on #649		
		Same species, on #650		
687 \$1	1.00 on \$2.40	Same species, on #651		
	20	D19 November 15 (Type of 2018, Set/4 with frames, strip/4 withou	t frames)	\mathbf{A}
690			Accipitridae	
694a	\$2.50	Same species, w/o white frames		
691	\$3.03	Spanish Eagle, Aquila adalberti	Accipitridae	
694b	\$3.00	Same species, w/o white frames		
692	\$4.00		Accipitridae	
694c	\$4.00	Same species, w/o white frames		
693	\$6.00	• · ·	Accipitridae	
694d	\$6.00	Same species, w/o white frames		
		2019 November 20 (Owls) (Set/4 & strip/4)		\mathbf{A}
695	\$5.50	Barred Owl, Strix varia	Strigidae	
699a	\$5.50	1		
696	\$6.70	Little Owl, Athene noctua	Strigidae	
699b	\$6.70	Same species, w/o white frames		
697	\$22.40		Strigidae	V69(2)
698	\$22.40	Same species, w/o white frames		
698			Strigidae	
699d	\$29.60	Same species, w/o white frames		
ARGI	ENTINA	2019 January 28 (Landmarks and Wildlife of Tierra del	Fuego) (Set/4)	A
2861	\$180.00	Gentoo Penguin, <i>Pygoscelis papu</i>	Spheniscidae	
ANG	OLA	2019 December 20 (Endemic Species) (S	SS)	\mathbf{A}
N/A		· · · · · · · · · · · · · · · · · · ·	Accipitridae	
		2019 December 20 (Sandgrouse) (Set/4, SS)		\mathbf{AZ}
N/A	300kz		Pteroclidae	122
N/A	300kz	Same species, facing left		
N/A			Pteroclidae	
N/A		Same species, facing left		
N/A			Pteroclidae	
		Burchell's Sandgrouse, Pterocles burchelli		
	-	-		

ANGOLA (continued)

N/A	300kz	2019 December 20 (Jacanas) (Set/4. SS/1) African Jacana, <i>Actophilornis africanus</i>	Jacanidae	\mathbf{AZ}
14/11	JOOKE	Same species & same value for the other three	Jacamaac	
N/A		Same species on the stamp and in the surround in bottom left.		
	Margin	Lesser Jacana, Microparra capensis (UR)	Jacanidae	
		2019 December 20 (Nightjars) (Set/4, SS/1)		\mathbf{AZ}
N/A		Rufous-cheeked Nightjar, Caprimulgus rufigena	Caprimulgidae	New
N/A		Eurasian Nightjar, Caprimulgus europaeus	Caprimulgidae	N T
N/A		Fiery-necked Nightjar, Caprimulgus pectoralis	Caprimulgidae	
N/A N/A		Swamp Nightjar, <i>Caprimulgus natalensis</i> Rufous-cheeked Nightjar, <i>Caprimulgus rufigena</i>	Caprimulgidae Caprimulgidae	New
1 N /A		LR: Eurasian Nightjar, Caprimulgus europaeus	Caprimulgidae	
	iviai giiis	Fiery-necked Nightjar, Caprimulgus pectoralis	Caprimulgidae	
		2019, December 20 (Birds of Prey) (Set/4,		\mathbf{AZ}
N/A	300kz	Bateleur, Terathopius ecaudatus	Accipitridae	AL
N/A		Crowned Eagle, Stephanoaetus coronatus	Accipitridae	
N/A		Verreaux's Eagle, Aquila verreauxii	Accipitridae	
N/A		African Fish-Eagle, Haliaeetus vocifer	Accipitridae	
N/A		Martial Eagle, Polemaetus bellicosus	Accipitridae	
	Margins	LC: African Fish-Eagle, Haliaeetus vocifer (LC)	Accipitridae	
		Tawny Eagle, Aquila rapax (RS)	Accipitridae	
ARM	ENIA 201	9 March 26 (Honoring Calouste Sarkis Gulbenkian, joint issue w	/Portugal) (Set/2	2) B
1183a		Indian Peafowl, Pavo cristatus	Phasianidae	
ARUI	BA	2018 September 28 (Water sports) (Set/4)		В
603	90c	Royal Tern, Thalasseus maximus	Laridae	
		Black Skimmer, Rynchops niger	Laridae	
604		Bridled Tern, Onychoprion anaethetus	Laridae	
605	200c	Sooty Tern, Onychoprion fuscatus	Laridae	
		2018 October 31 (Pets) (Set/6)		\mathbf{A}
614	500c	Rosy-faced Lovebird, Agapornis roseicollis	Psittaculidae	
		Fischer's Lovebird, Agapornis fischeri	Psittaculidae	
		Yellow-collared Lovebird, Agapornis personatus	Psittaculidae	
AUST	RALIA	2019 October 22 (Type of 2016, Items starting with) (Set/	(5, Set/5 SA)	В
5030	\$1.00	Australian Ibis, Threskiornis molucca	Threskiornithic	ae
5036	\$1.00	Same species, s/a		
AZEF	RBAIJAN	2019 September 29 (Europa) (Set/2)		\mathbf{AZ}
1235	0,50g	Great Rosefinch, Carpodacus rubicilla	Fringillidae	V69(1)
1236	0,60g		Phasianidae	
1237	SS 1.50m	Eurasian Hoopoe, <i>Upupa epops</i>	Upupidae	
BELA	RUS	2019 May 9 (Europa, National bird) (Set/2)		\mathbf{AZ}
1139	(1.62r)	White Stork, Ciconia ciconia and nest	Ciconiidae	
1140	(1.80r)	Same species, adult only		
1140a		SS of 4, 2 each #1139-1140		

BOLI V1645		2018 October 18 (Endangered bird Palkachum Cotinga, <i>Philbalura flavirostris boliviana</i> (ssp of Sv		A a)
1645a 1646 1646a	3bs 3bs	Same species, with red emblem Horned Curassow, <i>Pauxi unicornis</i> Same species, with red emblem lem on the stamps was put on all stamp stocks that remained after	Cracidae	of
Bolivia	closed beca	nuse of debt as of March 1, 2018, a decree authorized the Creation ace the closed postal company of Bolivia.		
BOTSV 1078	WANA 2p	2019 October 9 (Cranes) (Set/4, SS Blue Crane, <i>Grus paradisea</i>	S/1) Gruidae	AZ
1079	5p	Gray Crowned-Crane, Balearica regulorum	Gruidae	
1080	7p	Wattled Crane, Grus carunculatus	Gruidae	
1081	10p	Same species, in a horizontal format	Gruidae	
1081a		SS of one		
BRAZI	П	2018 November 6 (Pets) (Sheet of	30)	A
3384ac		Budgerigar, Melopsittacus undulatus (3 on perch)	Psittaculidae	
3384ad		Cockatiel, Nymphicus hollandicus	Cacatuidae	
		2018 December 4 (National museu	m 200m) (Single)	C*
3390	3.10r	Harpy Eagle, Harpia harpyja	Accipitridae	C
CENT	RAL AFRI	CAN REP. 2019 November 21 (Aquatic Birds)) (Set 4, SS/1)	AZ
N/A	900fr	Great Crested Grebe, Podiceps cristatus	Podicipedidae	
N/A	900fr	Mute Swan, Cygnus olor	Anatidae	
N/A	900fr	Gray Heron, Ardea cinerea	Ardeidae	
N/A	900fr	White Stork, Ciconia ciconia	Ciconiidae	
N/A	SS 3600fr	Roseate Spoonbill, <i>Platalea ajaja</i>	Threskiornithidae	
	Margin	Blue-footed Booby, Sula nebouxii	Sulidae	
		2020 January 27 (Discovery of Antarctica,		AZ
•		Lazarev (1788-1851) & Fabian Gottlieb von Bellingshausen (178	,	
N/A		Southern Rockhopper Penguin, Eudyptes chrysocome	Spheniscidae	
N/A		King Penguin, Aptenodytes patagonicus	Spheniscidae	
N/A		Adelie Penguin, Pygoscelis adeliae	Spheniscidae	
	Margin	LC: Chinstrap Penguin, Pygoscelis antarcticus	Spheniscidae	
		LL: Southern Rockhopper Penguin, Eudyptes chrysocome	Spheniscidae	
		2020 January 27 (Owls) (Set/4, SS/1)		AZ
N/A	900fr	Eurasian Scops-Owl, Otus scops	Strigidae	
N/A	900fr	Snowy Owl, Bubo scandiacus	Strigidae	
N/A	900fr	Barn Owl, Tyto alba	Tytonidae	
N/A	900fr	Eurasian Eagle-Owl, <i>Bubo bubo</i>	Strigidae	
N/A	SS 3600fr	Brown Wood-Owl, Strix leptogrammica	Strigidae	
	Margin	LL: Great Gray Owl, <i>Strix nebulosa</i> RS: Eurasian Eagle-Owl, <i>Bubo bubo sibiricus</i> (ssp)	Strigidae	
			Strigidae	
NT / A	0.50.0	2020 January 27 (Bee-eaters) (Set/4, St	*	AZ
N/A	850fr	Southern Carmine Bee-eater, Merops nubicoides	Meropidae	
N/A	850fr	Blue-throated Bee-eater, Merops viridis	Meropidae	
N/A	850fr	Blue-bearded Bee-eater, Nyctyornis athertoni Chestrut beeded Bee ester Mayora leach engulsi	Meropidae	
N/A	850fr	Chestnut-headed Bee-eater, Merops leschenaulti	Meropidae	

CENT	TRAL AFRI	CAN REPUBLIC (continued)		
N/A		Purple-bearded Bee-eater, Merops forsteni	Meropidae	
	Margin	UR: European Bee-eater, Merops apiaster	Meropidae	
		RS: White-fronted Bee-eater, Merops bullockoides	Meropidae	
		LL: Rainbow Bee-eater, Merops ornatus	Meropidae	
CHA	D	2020 February 24 (Kingfishers) Set/4, S	S/1)	\mathbf{AZ}
N/A	800f	Belted Kingfisher, Megaceryle alcyon	Alcedinidae	
N/A		Collared Kingfisher, <i>Todiramphus chloris</i>	Alcedinidae	
N/A		White-throated Kingfisher, <i>Halcyon smyrnensis</i>	Alcedinidae	
N/A	800f	Common Kingfisher, Alcedo atthis	Alcedinidae	
N/A	SS 3300fr	Pied Kingfisher, Ceryle rudis	Alcedinidae	
	Margin	UL: Blue-eared Kingfisher, Alcedo meninting	Alcedinidae	
		Crested Kingfisher, Megaceryle lugubris	Alcedinidae	
CHIN	IA (PR)	2019 July 20 (Poyang Lake) (Set/3)		В
4637	\$1.20	Oriental Stork, Ciconia boyciana	Ciconiidae	
		(at shoe-shaped island)		
4638	\$1.20	Oriental Stork, Ciconia boyciana	Ciconiidae	
		Tundra Swan, Cygnus columbianus	Anatidae	
		Siberian Crane, Leucogeranus leucogeranus	Gruidae	
		(Over Poyang Lake National Wetlands)		
COO	K ISLANDS	2018 May 4 (Birdpex) (Pair/2)		A
1594a	\$1.00	Short-tailed Shearwater, Ardenna	Procellariidae	V67(2)
1594b	\$4.80	Tropical Shearwater, Puffinus bailloni	Procellariidae	V69(1)
		2018 December 20 (Definitives with whi	te frames) (Set/12)	\mathbf{AZ}
1602	20c	Swamp Harrier, Circus approximans	Accipitridae	
1603	30c	Bateleur, Terathopius ecaudatus	Accipitridae	
1604	40c	Eurasian Pygmy-Owl, Glaucidium passerinum	Strigidae	
1605	50c	Madagascar Harrier-Hawk, Polyboroides radiatus	Accipitridae	V68(1)
1606	\$1.00	Barn Owl, Tyto alba	Tytonidae	
1607	\$2.00	Japanese Sparrowhawk, Accipiter gularis	Accipitridae	
1607a		SS of 6, #1602-1607		
1608	\$2.40	Hooded Vulture, Necrosyrtes monachus	Accipitridae	
1609	\$2.60	Booted Eagle, Hieraaetus pennatus	Accipitridae	
1610	\$4.50	Whistling Kite, Haliastur sphenurus	Accipitridae	
		Great Egret, Ardea alba	Ardeidae	*****
1611	\$5.00	Letter-winged Kite, Elanis scriptus	Accipitridae	V68(1)
1612	\$7.50	Egyptian Vulture, Neophron percnopterus	Accipitridae	
1613	\$10.00	Barking Owl, Ninox connivens	Strigidae	
1613a		SS of 6, #1608-1613		
1614a	-1	Same as listed for 1602-1613, but w/o white frames.		
		Inscribed "Rarotonga Cook Islands" (Definitives with wh		AZ
1615		Pale Chanting Goshawk, Melierax canorus	Accipitridae	
1616	30c	Great Horned Owl, Bubo virginianus	Strigidae	
1617	40c	Eurasian Eagle-Owl, <i>Bubo bubo</i>	Strigidae	
1618	50c	Costa Rican Pygmy-Owl, Glaucidium costaricanum 68(1)	Strigidae	
1619	\$1.00	Jackal Buzzard, Buteo rufofuscus	Accipitridae	
1620	\$2.00	Hen Harrier, Circus cyaneus (Stamp has Northern Harrier)	Accipitridae	

COOK	SLANDS	(continued)		
1620a		SS of 6, #1615-1620		
1621	\$2.40	Eastern Marsh-Harrier, Circus spilonotus	Accipitridae	
1622		Long-winged Harrier, Circus buffoni	Accipitridae	
1623		Asian Barred Owlet, Glaucidium cuculoides	Strigidae	
1624		Crested Eagle, Morphnus guianensis	Accipitridae	
1625		Lesser Spotted Eagle, Clanga pomarina	Accipitridae	
1626	\$10.00	White-browed Owl, Athene superciliaris	Strigidae	
1626a	Ψ10.00	SS of 6. #1621-1626	Strigitute	
1627a-l		Same species as above for 1615-1626, w/o white frames		
102/41		-		
4.600		2019 May 30 (Suwarow Atoll National Parl		ΑZ
1628a	50c	Lesser Frigatebird, Fregata ariel (LS)	Fregatidae	
		Red-footed Booby, Sula sula (RS)	Sulidae	
		Red-tailed Tropicbird, <i>Phaethon rubricauda</i> (LR)	Phaethontidae	
1628b		Masked Booby, Sula dactylatra	Sulidae	
1628f	50c	Brown Booby, Sula leucogaster	Sulidae	
1629	SS \$4.50	Lesser Frigatebird, Fregata ariel	Fregatidae	
Note: 162	8a-f & 162	29, all feature the Red-tailed Tropicbird, Phaethon rubricauda on	LR corner of the	
sheet of s	ix stamps,	but a little larger in the surround of the SS.		
		2019 June 19 (#1594a and 1594b Surcharge	ed)	A
1632a 50a	on \$1.00	Short-tailed Shearwater, Ardenna tenuirostris	Procellariidae	11
		Tropical Shearwater, Puffinus bailloni	Procellariidae	
10320 300	υπ ψ τ .ου	-		
		2019 November 20 (Type of 2018) (Set/4 &	& Strip/4)	AZ
		Inscribed "Cook Islands" w/white frames		
1640		White-backed Vulture, Gyps africanus	Accipitridae	
1641	\$20.60	Variable Hawk, Geranoaetus polyosoma	Accipitridae	
1641 1642	\$20.60 \$25.00	Variable Hawk, Geranoaetus polyosoma Galapagos Hawk, Buteo galapagoenis	Accipitridae Accipitridae	
1641	\$20.60	Variable Hawk, Geranoaetus polyosoma	Accipitridae	
1641 1642	\$20.60 \$25.00	Variable Hawk, Geranoaetus polyosoma Galapagos Hawk, Buteo galapagoenis	Accipitridae Accipitridae	
1641 1642 1643	\$20.60 \$25.00	Variable Hawk, <i>Geranoaetus polyosoma</i> Galapagos Hawk, <i>Buteo galapagoenis</i> Wedge-tailed Eagle, <i>Aquila audax</i>	Accipitridae Accipitridae	
1641 1642 1643 1644a-d	\$20.60 \$25.00	Variable Hawk, <i>Geranoaetus polyosoma</i> Galapagos Hawk, <i>Buteo galapagoenis</i> Wedge-tailed Eagle, <i>Aquila audax</i> Same birds as 1640-1643, but w/o white frames SS of four, Sc#1644a-1644b	Accipitridae Accipitridae Accipitridae	
1641 1642 1643 1644a-d 1644e	\$20.60 \$25.00 \$30.00	Variable Hawk, Geranoaetus polyosoma Galapagos Hawk, Buteo galapagoenis Wedge-tailed Eagle, Aquila audax Same birds as 1640-1643, but w/o white frames SS of four, Sc#1644a-1644b Inscribed "Rarotonga Cook Islands" w/ w	Accipitridae Accipitridae Accipitridae hite frames	
1641 1642 1643 1644a-d 1644e	\$20.60 \$25.00 \$30.00	Variable Hawk, <i>Geranoaetus polyosoma</i> Galapagos Hawk, <i>Buteo galapagoenis</i> Wedge-tailed Eagle, <i>Aquila audax</i> Same birds as 1640-1643, but w/o white frames SS of four, Sc#1644a-1644b Inscribed "Rarotonga Cook Islands" w/ w Levant Sparrowhawk, <i>Accipiter brevipes</i>	Accipitridae Accipitridae Accipitridae hite frames Accipitridae New	
1641 1642 1643 1644a-d 1644e 1645 1646	\$20.60 \$25.00 \$30.00 \$2.50 \$3.00	Variable Hawk, Geranoaetus polyosoma Galapagos Hawk, Buteo galapagoenis Wedge-tailed Eagle, Aquila audax Same birds as 1640-1643, but w/o white frames SS of four, Sc#1644a-1644b Inscribed "Rarotonga Cook Islands" w/ w Levant Sparrowhawk, Accipiter brevipes Zone-tailed Hawk, Buteo albonotatus	Accipitridae Accipitridae Accipitridae hite frames Accipitridae New Accipitridae	
1641 1642 1643 1644a-d 1644e 1645 1646 1647	\$20.60 \$25.00 \$30.00 \$2.50 \$3.00 \$4.00	Variable Hawk, Geranoaetus polyosoma Galapagos Hawk, Buteo galapagoenis Wedge-tailed Eagle, Aquila audax Same birds as 1640-1643, but w/o white frames SS of four, Sc#1644a-1644b Inscribed "Rarotonga Cook Islands" w/ w Levant Sparrowhawk, Accipiter brevipes Zone-tailed Hawk, Buteo albonotatus Roadside Hawk, Rupornis magnirostris	Accipitridae Accipitridae Accipitridae hite frames Accipitridae New Accipitridae Accipitridae	
1641 1642 1643 1644a-d 1644e 1645 1646 1647 1648	\$20.60 \$25.00 \$30.00 \$2.50 \$3.00	Variable Hawk, Geranoaetus polyosoma Galapagos Hawk, Buteo galapagoenis Wedge-tailed Eagle, Aquila audax Same birds as 1640-1643, but w/o white frames SS of four, Sc#1644a-1644b Inscribed "Rarotonga Cook Islands" w/ w Levant Sparrowhawk, Accipiter brevipes Zone-tailed Hawk, Buteo albonotatus Roadside Hawk, Rupornis magnirostris Harris's Hawk, Parabuteo unicinctus	Accipitridae Accipitridae Accipitridae hite frames Accipitridae New Accipitridae	
1641 1642 1643 1644a-d 1644e 1645 1646 1647 1648 1949 a-d	\$20.60 \$25.00 \$30.00 \$2.50 \$3.00 \$4.00	Variable Hawk, Geranoaetus polyosoma Galapagos Hawk, Buteo galapagoenis Wedge-tailed Eagle, Aquila audax Same birds as 1640-1643, but w/o white frames SS of four, Sc#1644a-1644b Inscribed "Rarotonga Cook Islands" w/ w Levant Sparrowhawk, Accipiter brevipes Zone-tailed Hawk, Buteo albonotatus Roadside Hawk, Rupornis magnirostris Harris's Hawk, Parabuteo unicinctus Block or vertical strip of 4, #1645-1648 w/o white frames	Accipitridae Accipitridae Accipitridae hite frames Accipitridae New Accipitridae Accipitridae Accipitridae	
1641 1642 1643 1644a-d 1644e 1645 1646 1647 1648	\$20.60 \$25.00 \$30.00 \$2.50 \$3.00 \$4.00	Variable Hawk, Geranoaetus polyosoma Galapagos Hawk, Buteo galapagoenis Wedge-tailed Eagle, Aquila audax Same birds as 1640-1643, but w/o white frames SS of four, Sc#1644a-1644b Inscribed "Rarotonga Cook Islands" w/ w Levant Sparrowhawk, Accipiter brevipes Zone-tailed Hawk, Buteo albonotatus Roadside Hawk, Rupornis magnirostris Harris's Hawk, Parabuteo unicinctus Block or vertical strip of 4, #1645-1648 w/o white frames SS of 4, #1649a-d, same birds as Sc#1645-1648, w/o white fram	Accipitridae Accipitridae Accipitridae hite frames Accipitridae New Accipitridae Accipitridae Accipitridae	
1641 1642 1643 1644a-d 1644e 1645 1646 1647 1648 1949 a-d 1649e	\$20.60 \$25.00 \$30.00 \$2.50 \$3.00 \$4.00 \$6.00	Variable Hawk, Geranoaetus polyosoma Galapagos Hawk, Buteo galapagoenis Wedge-tailed Eagle, Aquila audax Same birds as 1640-1643, but w/o white frames SS of four, Sc#1644a-1644b Inscribed "Rarotonga Cook Islands" w/ w Levant Sparrowhawk, Accipiter brevipes Zone-tailed Hawk, Buteo albonotatus Roadside Hawk, Rupornis magnirostris Harris's Hawk, Parabuteo unicinctus Block or vertical strip of 4, #1645-1648 w/o white frames SS of 4, #1649a-d, same birds as Sc#1645-1648, w/o white frames	Accipitridae Accipitridae Accipitridae hite frames Accipitridae Accipitridae Accipitridae Accipitridae Accipitridae	
1641 1642 1643 1644a-d 1644e 1645 1646 1647 1648 1949 a-d 1649e	\$20.60 \$25.00 \$30.00 \$2.50 \$3.00 \$4.00 \$6.00	Variable Hawk, Geranoaetus polyosoma Galapagos Hawk, Buteo galapagoenis Wedge-tailed Eagle, Aquila audax Same birds as 1640-1643, but w/o white frames SS of four, Sc#1644a-1644b Inscribed "Rarotonga Cook Islands" w/ w Levant Sparrowhawk, Accipiter brevipes Zone-tailed Hawk, Buteo albonotatus Roadside Hawk, Rupornis magnirostris Harris's Hawk, Parabuteo unicinctus Block or vertical strip of 4, #1645-1648 w/o white frames SS of 4, #1649a-d, same birds as Sc#1645-1648, w/o white fram Inscribed: "Cook Islands" w/white frames Military Macaw, Ara militaris	Accipitridae Accipitridae Accipitridae hite frames Accipitridae Accipitridae Accipitridae Accipitridae Accipitridae Accipitridae	
1641 1642 1643 1644a-d 1644e 1645 1646 1647 1648 1949 a-d 1649e	\$20.60 \$25.00 \$30.00 \$2.50 \$3.00 \$4.00 \$6.00	Variable Hawk, Geranoaetus polyosoma Galapagos Hawk, Buteo galapagoenis Wedge-tailed Eagle, Aquila audax Same birds as 1640-1643, but w/o white frames SS of four, Sc#1644a-1644b Inscribed "Rarotonga Cook Islands" w/ w Levant Sparrowhawk, Accipiter brevipes Zone-tailed Hawk, Buteo albonotatus Roadside Hawk, Rupornis magnirostris Harris's Hawk, Parabuteo unicinctus Block or vertical strip of 4, #1645-1648 w/o white frames SS of 4, #1649a-d, same birds as Sc#1645-1648, w/o white frame Inscribed: "Cook Islands" w/white frames Military Macaw, Ara militaris Blue-and-yellow Macaw, Ara ararauna	Accipitridae Accipitridae Accipitridae hite frames Accipitridae Accipitridae Accipitridae Accipitridae Accipitridae Accipitridae Accipitridae Accipitridae	
1641 1642 1643 1644a-d 1644e 1645 1646 1647 1648 1949 a-d 1649e	\$20.60 \$25.00 \$30.00 \$2.50 \$3.00 \$4.00 \$6.00 \$5.50 \$6.70 \$22.40	Variable Hawk, Geranoaetus polyosoma Galapagos Hawk, Buteo galapagoenis Wedge-tailed Eagle, Aquila audax Same birds as 1640-1643, but w/o white frames SS of four, Sc#1644a-1644b Inscribed "Rarotonga Cook Islands" w/ w Levant Sparrowhawk, Accipiter brevipes Zone-tailed Hawk, Buteo albonotatus Roadside Hawk, Rupornis magnirostris Harris's Hawk, Parabuteo unicinctus Block or vertical strip of 4, #1645-1648 w/o white frames SS of 4, #1649a-d, same birds as Sc#1645-1648, w/o white frames Military Macaw, Ara militaris Blue-and-yellow Macaw, Ara ararauna Red-and-green Macaw, Ara chloropterus	Accipitridae Accipitridae Accipitridae hite frames Accipitridae Accipitridae Accipitridae Accipitridae Accipitridae Accipitridae Psittacidae Psittacidae Psittacidae	
1641 1642 1643 1644a-d 1644e 1645 1646 1647 1648 1949 a-d 1649e 1650 1651 1652 1653	\$20.60 \$25.00 \$30.00 \$2.50 \$3.00 \$4.00 \$6.00	Variable Hawk, Geranoaetus polyosoma Galapagos Hawk, Buteo galapagoenis Wedge-tailed Eagle, Aquila audax Same birds as 1640-1643, but w/o white frames SS of four, Sc#1644a-1644b Inscribed "Rarotonga Cook Islands" w/ w Levant Sparrowhawk, Accipiter brevipes Zone-tailed Hawk, Buteo albonotatus Roadside Hawk, Rupornis magnirostris Harris's Hawk, Parabuteo unicinctus Block or vertical strip of 4, #1645-1648 w/o white frames SS of 4, #1649a-d, same birds as Sc#1645-1648, w/o white frames Military Macaw, Ara militaris Blue-and-yellow Macaw, Ara ararauna Red-and-green Macaw, Ara rubrogenys	Accipitridae Accipitridae Accipitridae hite frames Accipitridae Accipitridae Accipitridae Accipitridae Accipitridae Accipitridae Accipitridae Accipitridae	
1641 1642 1643 1644a-d 1644e 1645 1646 1647 1648 1949 a-d 1649e 1650 1651 1652 1653 1654a-d,	\$20.60 \$25.00 \$30.00 \$2.50 \$3.00 \$4.00 \$6.00 \$5.50 \$6.70 \$22.40	Variable Hawk, Geranoaetus polyosoma Galapagos Hawk, Buteo galapagoenis Wedge-tailed Eagle, Aquila audax Same birds as 1640-1643, but w/o white frames SS of four, Sc#1644a-1644b Inscribed "Rarotonga Cook Islands" w/ w Levant Sparrowhawk, Accipiter brevipes Zone-tailed Hawk, Buteo albonotatus Roadside Hawk, Rupornis magnirostris Harris's Hawk, Parabuteo unicinctus Block or vertical strip of 4, #1645-1648 w/o white frames SS of 4, #1649a-d, same birds as Sc#1645-1648, w/o white frames Military Macaw, Ara militaris Blue-and-yellow Macaw, Ara ararauna Red-and-green Macaw, Ara chloropterus Red-fronted Macaw, Ara rubrogenys Block or vert. strip of 4, #1650-1653	Accipitridae Accipitridae Accipitridae hite frames Accipitridae Accipitridae Accipitridae Accipitridae Accipitridae Accipitridae Psittacidae Psittacidae Psittacidae	
1641 1642 1643 1644a-d 1644e 1645 1646 1647 1648 1949 a-d 1649e 1650 1651 1652 1653	\$20.60 \$25.00 \$30.00 \$2.50 \$3.00 \$4.00 \$6.00 \$5.50 \$6.70 \$22.40	Variable Hawk, Geranoaetus polyosoma Galapagos Hawk, Buteo galapagoenis Wedge-tailed Eagle, Aquila audax Same birds as 1640-1643, but w/o white frames SS of four, Sc#1644a-1644b Inscribed "Rarotonga Cook Islands" w/ w Levant Sparrowhawk, Accipiter brevipes Zone-tailed Hawk, Buteo albonotatus Roadside Hawk, Rupornis magnirostris Harris's Hawk, Parabuteo unicinctus Block or vertical strip of 4, #1645-1648 w/o white frames SS of 4, #1649a-d, same birds as Sc#1645-1648, w/o white frames Military Macaw, Ara militaris Blue-and-yellow Macaw, Ara ararauna Red-and-green Macaw, Ara rubrogenys	Accipitridae Accipitridae Accipitridae hite frames Accipitridae Accipitridae Accipitridae Accipitridae Accipitridae Accipitridae Psittacidae Psittacidae Psittacidae	
1641 1642 1643 1644a-d 1644e 1645 1646 1647 1648 1949 a-d 1649e 1650 1651 1652 1653 1654a-d,	\$20.60 \$25.00 \$30.00 \$2.50 \$3.00 \$4.00 \$6.00 \$5.50 \$6.70 \$22.40	Variable Hawk, Geranoaetus polyosoma Galapagos Hawk, Buteo galapagoenis Wedge-tailed Eagle, Aquila audax Same birds as 1640-1643, but w/o white frames SS of four, Sc#1644a-1644b Inscribed "Rarotonga Cook Islands" w/ w Levant Sparrowhawk, Accipiter brevipes Zone-tailed Hawk, Buteo albonotatus Roadside Hawk, Rupornis magnirostris Harris's Hawk, Parabuteo unicinctus Block or vertical strip of 4, #1645-1648 w/o white frames SS of 4, #1649a-d, same birds as Sc#1645-1648, w/o white frames Military Macaw, Ara militaris Blue-and-yellow Macaw, Ara ararauna Red-and-green Macaw, Ara chloropterus Red-fronted Macaw, Ara rubrogenys Block or vert. strip of 4, #1650-1653 SS of 4, #1654a-d	Accipitridae Accipitridae Accipitridae hite frames Accipitridae Accipitridae Accipitridae Accipitridae Accipitridae Accipitridae Psittacidae Psittacidae Psittacidae Psittacidae Psittacidae	
1641 1642 1643 1644a-d 1644e 1645 1646 1647 1648 1949 a-d 1649e 1650 1651 1652 1653 1654a-d,	\$20.60 \$25.00 \$30.00 \$2.50 \$3.00 \$4.00 \$6.00 \$5.50 \$6.70 \$22.40	Variable Hawk, Geranoaetus polyosoma Galapagos Hawk, Buteo galapagoenis Wedge-tailed Eagle, Aquila audax Same birds as 1640-1643, but w/o white frames SS of four, Sc#1644a-1644b Inscribed "Rarotonga Cook Islands" w/ w Levant Sparrowhawk, Accipiter brevipes Zone-tailed Hawk, Buteo albonotatus Roadside Hawk, Rupornis magnirostris Harris's Hawk, Parabuteo unicinctus Block or vertical strip of 4, #1645-1648 w/o white frames SS of 4, #1649a-d, same birds as Sc#1645-1648, w/o white frames Military Macaw, Ara militaris Blue-and-yellow Macaw, Ara ararauna Red-and-green Macaw, Ara chloropterus Red-fronted Macaw, Ara rubrogenys Block or vert. strip of 4, #1650-1653	Accipitridae Accipitridae Accipitridae hite frames Accipitridae Accipitridae Accipitridae Accipitridae Accipitridae Accipitridae Psittacidae Psittacidae Psittacidae Psittacidae Psittacidae	

COOK	X ISLANDS	(continued)		
1656	\$6.70	Crowned Woodnymph, Thalurania colombica		
		(Stamp has Violet-Crowned Woodnymph)	Trochilidae	
1657	\$22.40	Sword-billed Hummingbird, Ensifera ensifera	Trochilidae	
1658	\$29.90	Green Hermit, Phaethornis guy	Trochilidae	
1659a-	d,	Block or vert. strip of 4 w/o white frames		
1659e		SS of 4, #1659a-d w/o white frames		
CUBA		2018 February 20 (Endangered Birds) (Set		ΑZ
6026		Red-breasted Goose, Branta ruficollis	Anatidae	
6027		Yellow-headed Parrot, Amazona oratrix	Psittacidae	
6028	65c	South Island Takahe, Porphyrio hochstetteri	Rallidae	
6020	7.5	(Stamp has species of mertello)	A 1	
6029		Philippine Eagle, Pithecophaga jefferyi	Accipitridae	
6030	85c	Kagu, Rhyochetos jubatus	Rhynochetidae	
6031	90c	Great Curassow, Crax ruba	Cracidae	
6032	SS 1.00p	Giant Kingbird, Tyrannus cubensis Imperf	Tyrannidae	
		2018 November 3 (Endemic Birds) (Set/6,	imperf SS/1)	AZ
6108	10c	Fernandina's Flicker, Colaptes fernandinae	Picidae	
6109		Yellow-headed Warbler, Teretistris fernandinae	Teretistridae	
6110		Cuban Oriole, <i>Icterus melanopsis</i> V68(2)	Icteridae	
6111		Greater Antillean Nightjar, Antrostomus cubanensis	Caprimulgidae V6	8(1)
6112	85c	Cuban Blackbird, Ptiloxena atroviolacea	Icteridae	
		(Stamp has genus of <i>Dives</i>)		
6113		Bare-legged Owl, Margarobyas lawrencii	Strigidae	
6114	SS 1.00p	Cuban Black Hawk, Buteogallus gundlachii	Accipitridae	
		2019 April 22 (Cienfuegos 200th Anniv.) (Set/4, SS/1)	A
6147a	40c	American Flamingo, Phoenicopterus ruber	Phoenicopteridae	
CURA	CAO	2019 January 21 (Aspects of Life	in Curacao) (Set/6)	C
359		Bananaquit, Coereba flaveola	Thraupidae	Ü
CZEC	H REPUBL	IC 2019 September 24 (Animals in Czech Republic Z	oo) (Set/4 + labels)	В
3802c	27k	Eurasian Spoonbill, <i>Platalea leucorodia</i>	Threskiornithidae	
DJIBO	UTI	2019 August 27 (Scott # 1059a-d surcharged in gold	or metallic red)	A
		r Lappet-faced Vulture, Torgos tracheliotos (1059a gold)	Accipitridae	
		r Same species, 1059a in (mr)		
		r Same species, 1059b in gold		
		r Same species, 1059b in (mr)		
		r Same species, 1059c in gold		
		r Same species, 1059c in (mr)		
		r Same species, 1059d in gold		
1821 5	90fr on 260f	r Same species, 1059d in (mr)		
		2019 August 27 (Bee-eaters) (Set/4	, SS/1)	ΑZ
1824a	250fr	White-throated Bee-eater, Merops albicollis	Meropidae	
1824b	250fr	European Bee-eater, Merops apiaster	Meropidae	
1824c	250fr	Chestnut-headed Bee-eater, Merops leschenaultia	Meropidae	
1824d	250fr	Red-throated Bee-eater, Merops bulocki	Meropidae	
1832	SS 1000fr	Northern Carmine Bee-eater, Merops nubicus	Meropidae	
	Margin	White-throated Bee-eater, Merops bullockoides	Meropidae	

DJIBOUTI (continued)

		2019 August 27 (Sunbirds) (Set/4, S	SS/1)	ΑZ
1825a	250fr	Collared Sunbird, Hedydipna collaris	Nectariniidae	
1825b		Mrs. Gould's Sunbird, Aethopyga gouldiae	Nectariniidae	
1825c		Crimson Sunbird, Aethopyga siparaja	Nectariniidae	
1825d	250fr	Green-tailed Sunbird, Aethopyga nipalensis	Nectariniidae	
1833	SS 1000fr	Streaked Spiderhunter, Arachnothera magna	Nectariniidae	
	Margin	UR: Black-throated Sunbird, Aethopyga saturate	Nectariniidae	
		LR: Olive-backed Sunbird, Cinnyris jugularis	Nectariniidae	
		2019 August 27 (Ducks Les Canard	ls) (Set/A SS/1)	ΑZ
1826a	250fr	Red-crested Pochard, Netta rufina	Anatidae	AL.
1826b	250fr	Tufted Duck, Aythya fuligula	Anatidae	
1826c		Common Goldeneye, Bucephala clangula	Anatidae	
1826d		Common Shelduck, Tadorna tadorna	Anatidae	
1834	SS 1000fr	Marbled Teal, Marmaronetta angustirostris	Anatidae	
100.		Common Merganser, Mergus merganser	Anatidae	
	111418111			
NT/A	2506.	2019 December 12 (Water birds) (S	* *	A
N/A N/A		Mallard, Anas platyrhynchos	Anatidae Ardeidae	
N/A N/A	250fr	Great Egret, Ardea alba modesta (ssp)	Alcedinidae	
N/A		Common Kingfisher, Alcedo atthis	Alcidae	
N/A		Atlantic Puffin, <i>Fratercula arctica</i> Pied Avocet, <i>Recurvirostra avosetta</i>	Recurvirostridae	
IN/A		American Flamingo, <i>Phoenicopterus ruber</i>	Phoenicopteridae	
	Maigin		•	
		2019, December 12(Raptors) (Set/4	*	AZ
N/A		Northern Goshawk, Accipiter gentilis	Accipitridae	
N/A	250fr	Eurasian Griffon, Gyps fulvus	Accipitridae	
N/A	250fr	Bald Eagle, Haliaeetus leucocephalus	Accipitridae	
N/A	250fr	Eurasian Scops-Owl, Otus scops	Strigidae	
N/A	SS 1000fr	King Vulture, Sarcoramphus papa	Cathartidae	
	Maragin	UL: Black-chested Buzzard-Hawk, Geranoaetus melanoleucus	Accipitridae	
		UC: Besra, Accipiter virgatus	Accipitridae	
		2019 December 12 (Kingfishers) (S	Set/4, SS/1)	\mathbf{AZ}
N/A	250fr	Black-backed Kingfisher, Ceyx erithaca	Alcedinidae	
N/A	250fr	Black-capped Kingfisher, Halcyon pileata	Alcedinidae	
N/A	250fr	Pied Kingfisher, Ceryle rudis	Alecdinidae	
N/A	250fr	Belted Kingfisher, Megaceryle alcyon	Alcedinidae	
N/A	SS 1000fr	Laughing Kookaburra, Dacelo novaeguineae	Alcedinidae	
	Margin	UL: Small Blue Kingfisher, Alcedo coerulescens	Alcedinidae	
		LR: Pied Kingfisher, Ceryle rudis	Alcedinidae	
		2019 December 12 (The Antarctic)	(Set/4, SS/1)A	
N/A	250fr		Phalacrocoracidae	
		(Stamp has genus of <i>Leucocarbo</i>)		
NA	250fr	Chinstrap Penguin, Pygoscelis antarcticus	Spheniscidae	
N/A	SS 1000fr	No bird on stamp.	-	
	Margin	UL: Wandering Albatross, Diomedea exulans	Diomedeidae	
	-	Emperor Penguin, Aptenodytes forsteri	Spheniscidae	

FALKLAN 1246	ND ISLA £1.01	Rock Shag, Phalacrocorax		Phalacrocoracidae	C
		Imperial Shag, Phalacrocor	rax airiceps	Phalacrocoracidae	
	(€1.50) (€1.50)	1 , , , , , ,	- '	Anatidae	A
FINLAND	(Åland	-	2019 May 9 (Europa) (Single)		A
	•) White-tailed Eagle, <i>Haliaee</i>		Accipitridae	A
	` ′	ANT. TERR.		11001p1011000	
619a			2019 November 28 (Set/2)	Cnhanigaidaa	A
619b	€1.50	King Penguin, <i>Aptenodytes</i> Same species, one penguin		Spheniscidae	
		Same species, one pengum	•		
GEORGIA			2019 August 25 (Europa) (Set/2)		A
560		Eurasian Sparrowhawk, Acc		Accipitridae	
561	2,401	Ring-necked Pheasant, Pha	sianus colchicus	Phasianidae	
GREAT B	RITAIN	J	2019 June 4 (Birds of Prey) (Set/10))	A
3827	(70p)	White-tailed Eagle, Haliaee	` ;	Accipitridae	
3828	(70p)	Merlin, Falco columbarius		Falconidae	
3829	(70p)	Hobby, Falco subbuteo		Falconidae	
3838	(70p)	Same species, SA			
3830	(70p)	-	uteo	Accipitridae	
3837	(70p)			1	
3831	(70p)	•	aetos	Accipitridae	
3831a		Horizontal strip of 5, 3827-		•	
3832	(70p)	_		Falconidae	
3833	(70p)	Northern Goshawk, Accipite	er gentilis	Accipitridae	
3837	(70p)	Eurasian Sparrowhawk, Aco	cipiter nisus	Accipitridae	
3835	(70p)	Red Kite, Milvus milvus		Accipitridae	
3836	(70p)	Peregrine Falcon, Falco per	regrinus	Falconidae	
CREAT R	RITAIN	N (Isle of Man) 2019 F	ebruary 12 (Wildlife) (Set/10)		A
		SA booklet stamps.	ebitary 12 (wheme) (Set/10)		A
2005c		Northern Gannet, <i>Morus ba</i>	esanus	Sulidae	
2008	(52p)		ssurrus	Sundae	
2005d	(52p)	Common Kingfisher, <i>Alced</i>	o atthis	Alcedinidae	
2009	(52p)	Same species, S.A.		Titodamiado	
2005f	(83p)	European Stonechat, Saxico	ola rubicola	Muscicapidae	
		-		•	
		N (Isle of Man)	2019 September 19 (Town and Co	• / /	A
2059a	(57p)	House Sparrow, Passer don	nesticus	Passeridae	
2059b	(57p)	Coal Tit, Periparus ater	the consenth o	Paridae Musaisanidas	
2059c	(57p)	Northern Wheatear, <i>Oenant</i>		Muscicapidae Paridae	
2059d 2060a	` • /	Long-tailed Tit, <i>Aegithalos</i> European Goldfinch, <i>Cardu</i>			
	` /			Fringillidae	
		European Stonechat, Saxico		Fringillidae Fringillidae	
		Common Chaffinch, <i>Fringi</i> Eurasian Blackbird, <i>Turdus</i>		Turdidae	
			тегиш	า นานานสะ	
2000a-u ila	2060a-d has RoW on any of the singles.				

GREAT	Γ BRITAIN	N (Jersey) 2019 September 2 (Woodland life) (Set/6)	A
2267		Barn Owl, Tyto alba	Tytonidae	
2268		Long-eared Owl, Asio otus	Strigidae	
2270	52p	Hawfinch, Coccothraustes coccothraustes	Fringillidae	
GREE	CE	2019 May 9 (Europa) (Set/2)		A
2887a		Rock Nuthatch, Sitta neumayer	Sittidae	
2887b	3,40€	Eleonors's Falcon, Falco eleonorae	Falconidae	
GUINE		2018 August 8 (Extinct species) (S		A
N/A	•	St. Helena Hoopoe, <i>Upupa antaios</i>	Upupidae	V67(4)
N/A	12,500fg	Guadalupe Caracara, Caracara lutosa New	Falconidae	
GUYA	NA	2019 May 1 (Wildlife of Aouth Ar	nerica) (Set/6)	A
4596a	\$200	Hyacinth Macaw, Anodorhynchus hyacinthinus	Psittacidae	
		Andean Condor, Vultur gryphus (UR)	Cathartidae	
4596b	\$200	Emu, Dromaius novaehollandiae	Casuariidae	
4596c	\$400	Not Identified.		
4596e	\$400	Toco Toucan, Ramphastos toco	Ramphastidae	
4596f	\$400	Tufted Coquette, Lophornis ornatus	Trochilidae	
		2019 May 16 (Valerie Rodway composer of Antion	al Anthem) (Set/4)	A
4596a	\$100	Hoatzin, Opisthocomus hoazin	Opisthocomidae	
		2019 May 16 (Inca Tern) (Set/4, S	S/1))	AZ
4599a	\$100	Inca Tern, Larosterna inca (facing right)	Laridae	
4599b	\$300	Same species, facing right		
4599c	\$500	Same species, facing front		
4599d	\$700	Same species, facing right		
4600	SS.\$800	Same species, horizontal stamp		
		2019 June 17 (Spangled Cotinga)	(Set/4, SS/1)	A
4605a	\$250	Spangled Cotinga, Cotinga cayana, facing left	Cotingidae	
4605b	\$350	Same species, facing right	S	
4605d	\$450	Same species, facing right		
4606d	\$550	Same species, on branch		
4606	SS \$800	Same species		
IRAQ		2019 August 25 (Set/4)		A
2065	250d	Bluethroat, Luscinia svecica	Muscicapidae	
2066	500d	Hawfinch, Coccothraustes coccothraustes	Fringillidae	
2067	750d	Common Chaffinch, Fringilla coelebs	Fringillidae	
2068	1000d	Eurasian Blue Tit, Cyanistes caeruleus	Paridae	
		(Stamp has Blue Tit, genus of Parus)		
KIRIBA	ATI	2019 July 1 (Set/4)		A
1054	40c	Long-tailed Jaeger, Stercorarius longicaudus	Stercorariidae	
1055	55c	Leach's Storm-Petrel, Oceanodroma leucorhoa	Hydrobatidae	
1056	75c	Juan Fernandez Petrel, Pterodroma externa	Procellariidae	
1057	\$2.50	Sooty Shearwater, Ardenna grisea	Procellariidae	
		(Stamp has scientific name of Puffinus griseus)		
LIBER	IA	2020 January 6 (Mushrooms and	Owls) (St/6, SS/1)	AZ
N/A	\$200.00	Barred Owl, Strix varia	Strigidae	
N/A	\$200.00	Burrowing Owl, Athene cunicularia	Strigidae	

LIBERIA (continu	ued)		
	Barn Owl, Tyto alba	Tytonidae	
	Long-eared Owl, Asio otus	Strigidae	
N/A \$200.00		Strigidae	
N/A \$200.00		Strigidae	
N/A SS \$1200.00	Barred Owl, Strix varia	Strigidae	
Margin	UC: Barred Owl, Strix varia	Strigidae	
C	Great Horned Owl, Bubo virginianus	Strigidae	
	2020 January 6 (Birds of Liberi	a) (Set/6, SS/1)	\mathbf{AZ}
N/A \$200.00	Blue-bellied Roller, Coracias cyanogaster	Coraciidae	
	Great Blue Turaco, Corythaeola cristata	Musophagidae	
N/A \$200.00		Strigidae	
	Helmeted Guineafowl, Numida meleagris	Numididae	
	Great Blue Turaco, Corythaeola cristata	Musophagidae	
	Rose-ringed Parakeet, Psittacula krameri	Psittaculidae	
N/A SS \$1260.00	African Fish-Eagle, Haliaeetus vocifer	Accipitridae	
Margin	RS: Gray Parrot, Psittacus erithacus timneh (ssp)	Psittacidae	
C	LL: Pied Kingfisher, Ceryle rudis	Alcedinidae	
MALAWI	2019 October 8 (Domesticated I	Rirds of Malawi)	ΑZ
	nant stamps, entitled "Domesticated Birds of Malawi"; The las		
	es of a duck & a chicken not listed in Clement's Checklist. Six		
	them for this reason, but have Sc#909 and 910.	55 5 are arso part or t	.1115 15540,
	Common Quail, Coturnix coturnix	Phasianidae	
	Helmeted Guineafowl, <i>Numida meleagris</i>	Numididae	
	Wild Turkey, Melegris gallopavo	Phasianidae	
	Rock Pigeon, Columba livia	Columbidae	
	Common Quail, Coturnix coturnix	Phasianidae	
	Helmeted Guineafowl, <i>Numida meleagris</i>	Numididae	
	Wild Turkey, Melegris gallopavo	Phasianidae	
	Rock Pigeon, Columba livia	Columbidae	
MALDIVE ISLA			\mathbf{AZ}
	Southern Cassowary, Casuarius casuarius	Casuariidae	AL
	South Island Takahe, <i>Porphyrio hochstetteri</i>	Rallidae	
	Weka, Gallirallus australis	Rallidae	
	Falkland Steamer-Duck, <i>Tachyeres brachypterus</i>	Anatidae	
	African Penguin, Spheniscus demersus	Spheniscidae	
	Ostrich, Struthio camelus	Struthionidae	
man giri			
27/4	2019 Februray 12 (Eagles) (Set	-	AZ
	Bateleur, Terathopius ecaudatus	Accipitridae	
	Brown Snake-Eagle, Circaetus cinereus	Accipitridae	
	White-tailed Eagle, Haliaeetus albicilla	Accipitridae	
	Bald Eagle, Haliaeetus leucocephalus	Accipitridae	
	G ,	Accipitridae	
Margin	Golden Eagle, Aquila chrysaetos	Accipitridae	
	2019 February 12 (Pigeons) (Se	*	AZ
	Eurasian Collared Dove, Streptopelia decaocto	Columbidae	
	European Turtle-Dove, Streptopelia turtur	Columbidae	
N/A 20r	Victoria Crowned-Pigeon, Goura victoria	Columbidae	

MALD	DIVE ISLA	NDS (continued)		
N/A		Spotted Dove, <i>Streptopelia chinensis</i> (Stamp has genus of <i>spilopelia</i>)	Columbidae	
N/A	SS 60r	Asian Emerald Dove, <i>Chalcohaps indica</i>	Columbidae	
,		White-crowned Pigeon, <i>Patagioenas leucocephala</i>	Columbidae	
				A 77
NT/A	20-	2019 February 12 (Parrots) (Set/4,	,	ΑZ
N/A N/A		Australian King-Parrot, Alisterus scapularis	Psittaculidae	
N/A N/A		Hyacinth Macaw, Anodorhynchus hyacinthinus	Psittacidae Psittaculidae	
N/A N/A		Fischer's Lovebird, Agapornis fischeri Turquoise fronted Porret. Amazona gestiva	Psittacidae Psittacidae	
N/A N.A		Turquoise-fronted Parrot, Amazona aestiva Valloy, grosted Cocketoo, Cacatra sylphyraa	Cacatuidae	
IN.A		Yellow-crested Cockatoo, <i>Cacatua sulphurea</i> Gray Parrot, <i>Psittacus erithacus</i>	Psittacidae	
	Maigiii	•		
		2019 February 12 (Indigo birds) (S		ΑZ
N/A		Indigo Bunting, Passerina cyanea 3	Cardinalidae	
N/A		Same species, Q		
N/A		Same species, ♂& ♀		
N/A		Same species, δ		
N/A	SS 60r	Same species, on stamp & in margin		
		2019 February 12 (Falcons) (Se	ete/4, SS/1)	AZ
N/A	20r	Lanner Falcon, Falco biarmicus	Falconidae	
N/A		Gyrfalcon, Falco rusticolus	Falconidae	
N/A		Amur Falcon, Falco amurensis	Falconidae	
N/A		Brown Falcon, Falco berigora	Falconidae	
N/A		Eleonor's Falcon, Falco eleonorae	Falconidae	
	Margin	RS: Amur Falcon, Falco amurensis	Falconidae	
		LS: Gray Kestrel, Falco ardosiaceus	Falconidae	
		2019 February 12 (Ducks) (Set/4,	SS/1)	ΑZ
N/A	22r	King Eider, Somateria spectabilis	Anatidae	
N/A	22r	Hooded Merganser, Lophodytes cucullatus	Anatidae	
N/A	22r	Mandarin Duck, Aix galericulata	Anatidae	
N/A	22r	Long-tailed Duck, Clangula hyemalis	Anatidae	
N/A	SS 70r	Ruddy Shelduck, Tadorna ferruginea	Anatidae	
	Margin	Wood Duck, Aix sponsa	Anatidae	
NEVIS	2	2019 March 16 (Pigeons & Doves) (Set/4)	ΑZ
1984	,	Sheet of 4	(5004)	AL
1984a	\$4.00	White-tipped Dove, <i>Leptotila verreauxi</i>	Columbidae	
1984b	\$5.00	Ruddy Ground-Dove, Columbina talpacoti	Columbidae	
1984c	\$6.00	Pale-vented Pigeon, <i>Patagioenas cayennensis</i>	Columbidae	
1984d	\$7.00	Rock Pigeon, Columba livia	Columbidae	
NIGEI		2019 December 20 (Lighthouses and Wate	, , , , ,	AZ
N/A	800fr	Mediterranean Gull, Ichthyaetus melanocephalus	Laridae	
N/A	800fr	Pied Cormorant, Phalacrocorax varius	Phalacrocoridae	
N/A	800fr	Variable Oystercatcher, <i>Haematopus unicolor</i>	Haematopodidae	
N/A	800fr	Common Tern, Sterna hirundo	Laridae	
N/A	SS 3300fr	Great White Pelican, Pelecanus onocrotalus	Pelecanidae	
	iviargin	Black-browed Albatross, <i>Thalassarche melanophris</i>	Diomedeidae	

NIGER (continued)

		2019 December 20 (The Antarctic)	(Set/4, SS/1)	ΑZ
N/A	800fr	Emperor Penguin, Aptenodytes forsteri	Spheniscidae	
N/A	800fr	Wandering Albatross, Diomedea exulans	Diomedeidae	
N/A	800fr	Chinstrap Penguin, <i>Pygoscelis antarcticus</i>	Spheniscidae	
N/A	SS 3300fr	King Penguin, Aptenodytes patagonicus	Spheniscidae	
	Margin		Spheniscidae	
		2019 December 20 (Owls) (Set/4, S	SS/1)	ΑZ
N/A	800fr	Eurasian Scops-Owl, Otus scops	Strigidae	
N/A		Blakiston's Fish-Owl, <i>Bubo blakistoni</i>	Strigidae	
N/A		Eurasian Eagle-Owl, <i>Bubo bubo sibiricus</i> (ssp)	Strigidae	
N/A		Long-eared Owl, Asio otus	Strigidae	
N/A	SS 3300fr	Great Gray Owl, Strix nebulosa	Strigidae	
		Barn Owl, Tyto alba	Tytonidae	
	111111111111	2019 December 20 (Birds of Niger	•	ΑZ
N/A	800fr	Hamerkop, Scopus umbretta	Scopidae	112
N/A		African Sacred Ibis, Threskiornis aethiopicus	Threskiornithidae	
N/A		Eurasian Wigeon, Mareca penelope	Anatidae	
N/A		Red-necked Falcon, Falco chicquera	Falconidae	
N/A		Greater Flamingo, <i>Phoenicopterus roseus</i>	Phoenicopteridae	
14/11		RS: Secretary-bird, Sagittarius serpentarius	Sagittariidae	
	Margin	LL: Senegal Parrot, Poicephalus senegalus	Psittacidae	
POLA		2019 October 30 (Birds of Singapore and F		A
4461a		Oriental Pied-Hornbill, Anthracoceros albirostris	Bucerotidae	
4461b	3.30z	Peregrine Falcon, Falco peregrinus	Falconidae	
ST. TE	IOMAS & 1	PRINCE 2019 December 20 (Owls) (Set/4, S	SS/1)	AZ
N/A	31db	Ural Owl, Strix uralensis	Strigidae	
N/A	31db	Great Horned Owl, Bubo virginianus	Strigidae	
N/A	31db	Northern Saw-Whet Owl, Aegolius acadicus	Strigidae	
N/A	31db	Snowy Owl, Bubo scandiacus	Strigidae	
N/A	SS 124db	Eurasian Eagle-Owl, Bubo bubo	Strigidae	
	Margin	Barn Owl, Tyto alba	Tytonidae	
		Short-eared Owl, Asio flammeus	Strigidae	
		2019 December 20 (Rare Birds) (S	et/4, SS/1)	ΑZ
N/A	31db	Gray Crowned-Crane, Balearica regulorum	Gruidae	
N/A	31db	New Zealand Kaka, Nestor meridionalis	Strigopidae	
N/A	31db	South Island Takahe, Porphyrio hochstetteri	Rallidae	
N/A	31db	Cape Gannet, Morus capensis	Sulidae	
N/A	SS 124db	Indigo Macaw, Anodrhynchus leari	Psittaculidae	
		Red-crowned Crane, Grus japonensis	Gruidae	
CENIE			otion) (Cinala)	D
SENEO		2017 June 5 (Environmental Protect	Ciconiidae	В
1742	3001	Marabou Stork, Leptoptilos crumenifer	Ciconnidae	
	A LEONE	2019 August 30 (Owls)(Set/4, SS/1	.)	AZ
N/A		enant stamps and a SS, entitled "Owls".	Strigidae	
		Long-eared Owl, Asio otus	Strigidae Strigidae	
N/A		Great Gray Owl, Strix nebulosa	Strigidae	
N/A	12,30016	Eurasian Eagle-Owl, <i>Bubo bubo</i>	Strigidae	

SIER	RRA LEONE	(continued)		
N/A		Short-eared Owl, Asio flammeus	Strigidae	
N/A	-	Barn Owl, Tyto alba	Tytonidae	
	Margin	LL & RS: Great Horned Owl, bubo virginianus	Strigidae	
		2019 August 30 (Sunbirds) (Set/4	, SS/1)	ΑZ
N/A	12,500le	Ruby-cheeked Sunbird, Chalcoparia singalensis	Nectariniidae	
N/A	12,500le	Southern Double-collared Sunbird, Cinnyris chalybeus	Nectariniidae	
N/A	12.500le	Copper-throated Sunbird, Leptocoma calcostetha	Nectariniidae	
N/A	12,500le	Van Hasselt's Sunbird, Leptocoma brasiliana	Nectariniidae	
N/A	SS 50,000le	Scarlet-chested Sunbird, <i>Chalcomitra senegalensis</i>	Nectariniidae	
	Margin	Collared Sunbird, Hedydipna collaris	Nectariniidae	
		2019 October 1 (Flamingos) (Set.	/4, SS/1)	ΑZ
A she	eet of four se-t	enant stamps and a SS, entitled "Flamingos".		
N/A		Greater Flamingo, Phoenicopterus roseus	Phoenicopteridae	
N/A		James's Flamingo, Phoenicoparrus jamesi	Phoenicopteridae	
N/A	12,500le	Chilean Flamingo, Phoenicopterus chilensis	Phoenicopteridae	
N/A	12,500le	American Flamingo, Phoenicopterus ruber	Phoenicopteridae	
N/A	5SS 0,000le	Andean Flamingo, Phoenicoparrus andinus	Phoenicopteridae	
	Margin	American Flamingo, Phoenicopterus ruber	Phoenicopteridae	
		2019 October 1	\mathbf{AZ}	
		enant stamps and a SS, entitled "Bee-eaters".		
N/A		Red-bearded Bee-eater, Nyctyornis amictus	Meropidae	
N/A		Blue-throated Bee-eater, Merops viridis	Meropidae	
N/A		Red-throated Bee-eater, Merops bulocki	Meropidae	
N/A		Blue-headed Bee-eater, Nyctyornis athertoni	Meropidae	
N/A	-	Chestnut-headed Bee-eater, Merops leschenaultia	Meropidae	
	Margin	Northern Carmine Bee-eater, Merops nubicus	Meropidae	
		2019 October 1	\mathbf{AZ}	
A she	eet of four se-t	enant stamps and a SS, entitled "Water Birds".		
N/A	12.500le	Great White Pelican, Pelecanus onocrotalus	Pelecanidae	
N/A	-	Reddish Egret, Egretta rufescens	Ardeidae	
N/A	-	Great Egret, Ardea alba	Ardeidae	
N/A	12,500le	Great Crested Grebe, <i>Podiceps cristatus</i>	Podicipedidae	
N/A	SS 50,000le	Great Blue Heron, Ardea herodias	Ardeidae	
		Common Loon, Gavia immer	Gaviidae	
	Č	Wood Duck, Aix sponsa	Anatidae	
		2019 October 30 (Antarctica) (Se	t/4, SS/1)	ΑZ
N/A	12,500le	Snow Petrel, Pagodroma nivea (UR)	Procellariidae	
	,	andWandering Albatross, Diomedea exulans (LL)	Diomedeidae	
N/A	12,500le	Gentoo Penguin, Pygoscelis papua	Spheniscidae	
N/A	SS 50,000le	Adelie Penguin, <i>Pygoscelis adeliae</i>	Spheniscidae	
	Margin	King Penguin, Aptenodytes patagonicus	Spheniscidae	
		2019 October 30 (Birds of Prey)	(Set/4, SS/1)	ΑZ
A she	eet of four se-t	enant stamps and a SS, entitled "".	, ,	
N/A		Eurasian Kestrel, Falco tinnunculus	Falconidae	
N/A	-	Eurasian Sparrowhawk, Accipiter nisus	Accipitridae	
N/A	12,500le	Red Kite, Milvus milvus	Accipitridae	

SIER	RRA LEONE	(continued)		
N/A	12,500le	Osprey, Pandion haliaetus	Pandionidae	
N/A		Long-legged Buzzard, Buteo rufinus	Accipitridae	
	Margin	Northern Goshawk, Accipiter gentilis	Accipitridae	
		2019 October 30 (Hummingbirds)	(Set/4, SS/1)	ΑZ
N/A	12,500le	Mexican Violetear, Colibri thalassinus	Trochilidae	
N/A	12,500le	Many-spotted Hummingbird, Taphrospinus hypostictus	Trochilidae New	
		(Stamp has genus of <i>Leucippus</i>)		
N/A		Purple-throated Carib, Eulampis jugularis	Trochilidae	
N/A		Cinnamon Hummingbird, Amazilia rutila	Trochilidae	
N/A	SS 50,000le	Long-tailed Sylph, Aglaiocercus kingi	Trochilidae	
		(Stamp has species of kingii)	T 1:1: 1	
	Margin	Ruby-throated Hummingbird, Archilochus colubris	Trochilidae	
		2019 November 28 (Extinct Specie		ΑZ
N/A		South Island Giant Moa, Dinornis robustus (Ext)	Dinornithidae	
N/A	SS 50,000le	Great Auk, <i>Pinguinus impennis</i>	Alcidae	
		2019 November 28 (Kingfishera) (Set/4, SS/1)	ΑZ
N/A		Pied Kingfisher, Ceryle rudis	Alcedinidae	
N/A		Blue-banded Kingfisher, Alcedo euryzona	Alcedinidae	
N/A		Common Kingfisher, Alcedo atthis	Alcedinidae	
N/A		Laughing Kookaburra, Dacelo novaeguineas	Alcedinidae	
N/A		Blue-winged Kookaburra, Dacelo leachii	Alcedinidae	
	Margin	Blue-eared Kingfisher, Alcedo meninting	Alcedinidae	
		2019 December 30 (Protected Bird		\mathbf{AZ}
N/A	12,500le	White-winged Flufftail, Sarothrura ayresi	Sarothruridae	
N/A	12,500le	Southern Bald Ibis, Geronticus calvus	Threskiornithidae	
N/A	12,500le	Wattled Crane, Bugeranus carunculatus	Gruidae	
3.T./.A	10 7001	(Stamp has scientific name of <i>Grus carunculata</i>)	3.6	
N/A	12.500le	Sharpe's Longclaw, <i>Hemimacronyz sharpei</i> New (Has genus of <i>Macronyx</i>)	Motacillidae	
N/A	SS 50,000le	White-necked Rockfowl, Picathartes gymnocephalus	Picathartidae	
	Margin	Wattled Crane, Bugeranus carunculatus	Gruidae	
		2019 December 30 (Owls) (Set/4,	SS/1)	ΑZ
N/A		Eastern Screech-Owl, Megascops asio	Strigidae	
N/A	12,500le	Southern White-faced Owl, Ptilopsis granti	Strigidae	
N/A		Northern White-faced Owl, Ptilopsis leucotis	Strigidae	
N/A	12,500le	Brown Wood-Owl, Strix leptogrammica	Strigidae	
N/A		Long-eared Owl, Asio otus	Strigidae	
	Margin	RS: Long-eared Owl, Asio otus	Strigidae	
		UL: Barred Owl, Strix varia	Strigidae	
		2019 December 3 (Ducks) (Set/4, S	5	ΑZ
N/A	12,500le	Black-bellied Whistling-Duck, Dendrocygna autumnalis	Anatidae	
N/A	12,500le	Mallard, Anas platyrhynchos	Anatidae	
N/A	12,500le	Canvas, Aythya valisineria	Anatidae	
N/A	12,500le	Marbled Teal, Marmaronetta augustirostris	Anatidae	
N/A	Ss 50,000le	Spotted Whistling-Duck, <i>Dendrocygna guttata</i>	Anatidae	
	Margin	UL: Black-bellied Whistling-Duck, Dendrocygn autumnalis	Anatidae Anatidae	
		LL & LR: Fulvous Whistling-Duck, Dendrocygna bicolor	Allatiuat	

SIERRA LEONE (continued)

		2020 January 30 (Discovery of Antarctic, 200y)	(Set/5 + label, SS/1)	BZ
N/A	-	Gentoo Penguin, Pygoscelis papua	Spheniscidae	
N/A	-	Wandering Albatross, Diomedea exulans	Diomedeidae	
N/A	SS 20,000le	Same species as above		
TOG	O	2019 August 30 (Extinct Specie	es) (Set/4, SS/1)	AZ
N/A		Hawaiian Rail, Zapornia sandwichensis	Rallidae	
		(Stamp has a genus of <i>Pennula</i>)		
N/A	SS 3300fr	Bishop Oo, Moho bishopi	Meliphagidae	
	Margin	UR: Kaua'i Akialoa, Hemignathus stejnegeri	Fringillidae	
	C	LL: Oahu Akialoa, Hemignathus ellisianus	Fringillidae	
		2019 August 30 (Kingfishers) (Set/4 SS/1)	ΑZ
N/A	800fr	Azure Kingfisher, Ceyx azureus	Alcedinidae	
N/A		Laughing Kookaburra, Dacelo novaeguineae	Alcedinidae	
N/A		Black-backed Dwarf-Kingfisher, Ceyx erithaca	Alcedinidae	
N/A		Giant Kingfisher, Megaceryle maxima	Alcedinidae	
N/A		Forest Kingfisher, <i>Todiramphus macleayii</i>	Alcedinidae	
1 1/1 1		Giant Kingfisher, Megaceryle maxima	Alcedinidae	
	William			. ~
3.T/A	2000	2019 August 30 (Weaver bird s		AZ
N/A		Holub's Golden-Weaver, <i>Ploceus xanthops</i>	Ploceidae	
N/A		Lesser Masked-Weaver, <i>Ploceus intermedius</i>	Ploceidae	17(0(1)
N/A		Black-breasted Weaver, <i>Ploceus benghalensis</i>	Ploceidae	V69(1)
N/A		African Golden-Weaver, <i>Ploceus subaureus</i>	Placeidae New	V/(O(1)
N/A		Taveta Golden-Weaver, <i>Ploceus castaneiceps</i>	Ploceidae	V69(1)
	Margin	Village Weaver, Ploceus cucullatus	Ploceidae	
		2019 August 30 (Genus Estrilde	a species) (Set/4, SS/1)	AZ
N/A	800fr	Black-headed Waxbill, Estrilda atricapilla V69(1)	Estrildidae	
		(Previously shown on a 1982 Staffa local issue)		
N/A		Black-faced Waxbill, Estrilda erythronotos	Estrildidae	
N/A		Black-rumped Waxbill, Estrilda troglodytes	Estrildidae	
N/A		Orange-cheeked Waxbill, Estrilda melpoda	Estrildidae	
N/A		Lavender Waxbill, Estrilda caerulescens	Estrildidae	
	Margin	Common Waxbill, Estrilda astrild	Estrildidae	
		2019 August 30 (Starling family	y species) (Set/4, SS/1)	AZ
N/A	800fr	Chestnut-tailed Starling, Sturnia malabarica	Sturnidae	V69(1)
N/A	800fr	Metallic Starling, Aplonis metallica New	Sturnidae	. ,
		(Previously shown on an Australia 2005 envelope)		
N/A	800fr	Hildebrandt's Starling, Lamprotornis hildebrandti	Sturnidae	
N/A	800fr	Emerald Starling, Lamprotornis iris	Sturnidae	
N/A	SS 3300fr	European Starling, Sturnus vulgaris	Sturnidae	
	Margin		Sturnidae	
		2019 August 30 (Paradise-flyca	tcher species) (Set/4 SS	5/1) AZ
N/A	800fr	African Paradise-Flycatcher, <i>Terpsiphone viridis</i>	Monarchidae)
N/A		Japanese Paradise-Flycatcher, Terpsiphone atrocaudata	Monarchidae	
N/A		Mascarene Paradise-Flycatcher, Terpsiphone bourbonnensis		
N/A		Madagascar Paradise-Flycatcher, <i>Terpisphone mutate</i>	Monarchidae	
	00011			

TOG	O (continued)		
N/A	SS 3300fr	Indian Paradise-Flycatcher, <i>Terpsiphone paradisi</i> Blyth's Paradise-Flycatcher, <i>Terpsiphone affinis</i> Monarchi	
		2019 November 5 (The ntarctic) (Set/4, SS/1)	\mathbf{AZ}
NA	800fr	Emperor Penguin, Aptenodytes forsteri Sphenisci	
N/A	800fr	Wandering Albatross, <i>Diomedea exulans</i> Diomede	
N/A	SS 3300fr	No stamp of bird on the sheet but in the surrounds	
		King Penguin, Aptenodytes patagonicus Sphenisci	dae
		2019 November 5 " (Sparrow species) (Set/4,	SS/1) AZ
N/A	800fr	White-crowned Sparrow, Zonotrichia leucophrys Passerelli	
		Eurasian Tree Sparrow, <i>Passer montanus</i> (LS) Passerelli	dae
N/A	800fr	Gouldian Finch, Erythrura gouldiae ($\lozenge \& \lozenge$) Estrildida	
N/A		Sudan Golden Sparrow, <i>Passer luteus</i> Passerida	
N/A	800fr	Spanish Sparrow, Passer hispaniolensis Passerida	e
N/A	SS 3300fr	Blanford's Snowfinch, Montifringilla blanfordi Passerida	e V69(1)
		(Stamp has genus of <i>Pyrgilruda</i> (UR)	
		Purple Finch, <i>Haemorhous purpureus</i> (UL) Fringillid	ae
	Margin	RS: Double-barred Finch, <i>Taeniopygia bichenovii</i> Estrildida	ıe
		LL: Cape Sparrow, Passer melanurus Passerida	e
		2019 November 5 (Owls) (Set/4, SS/1)	\mathbf{AZ}
N/A	800fr	Eastern Screech-Owl, <i>Megascops asio</i> Strigidae	
N/A	800fr	Tawny Owl, <i>Strix aluco</i> Strigidae	
N/A	800fr	Barn Owl, Tyto alba Tytonidae	3
N/A	800fr	Spotted Owlet, <i>Athene brama</i> Strigidae	
N/A	3300fr	Australian Masked-Owl, <i>Tyto novaehollandiae</i> Tytonidae	3
	Margin	Barn Owl, <i>Tyto alba</i> Tytonidae	÷
		2019 November 5 (Indigo Bunting) (Set/4, SS	S/1) AZ
N/A	800fr	Indigo Bunting, <i>Passerina cyanea</i> Cardinali	
N/A		Same species	
		the SS show this same species and also in the surrounds on the SS.	
		2019 November 5 (Secretary-bird) (Set/4, SS/	(1) AZ
N/A	800fr	Secretary-bird, Sagittarius serpentarius Sagittariis Sagittariis	*
		itions of the bird on four 800fr stamps as well as on the 3300fr SS and in the	
		2019 November 5 (Drongo bird species) (Set/	-
N/A	800fr	Greater Racket-tailed Drongo, <i>Dicrurus paradiseus</i> Dicrurida	
N/A	800fr	Black Drongo, Dicrurus macrocercus Dicrurida	
N/A	800fr	Ashy Drongo, <i>Dicrurus leucophaeus</i> V69(1) Dicrurida	
N/A	800fr	Crested Drongo, <i>Dicrurus forficatus</i> Dicrurida	
N/A	SS 3300fr	Ashy Drongo, <i>Dicrurus leucophaeus</i> Dicrurida	
1 1/ 2 1		Lesser Racket-tailed Drongo, <i>Dicrurus remifer</i> Dicrurida	
	iviai giii		` /
N/A	ያለበ ተ -	2019 November 5 (Eagles) (Set/4, SS/1) Golden Eagle Aguila chrysagtes Accipitric	AZ
N/A N/A	800fr	Golden Eagle, Aquila chrysaetos Accipitrio Steller's Sea-Eagle, Haliaeetus pelagicus Accipitrio	
N/A N/A	800fr	Harpy Eagle, Harpia harpyja Accipitric Accipitric	
N/A	800fr	White-tailed Eagle, <i>Haliaeetus albicilla</i> Accipitric	
N/A	SS 3300fr	Crowned Eagle, Stephanoaetus coronatus Accipitrio	
1 1 / 1 1	Margin	Bald Eagle, Haliaeetus leucocephalus Accipitrio	
	iviaigiii	Accipiting	iuc

TOGO (continued)

		2019 November 5 (Vultures) (Set/4. SS/1)		
N/A	800fr	Egyptian Vulture, Neophron percnopterus	Accipitridae	
N/A	800fr	Eurasian Griffon, <i>Gyps fulvus</i> Accipitridae		
N/A	800fr	Turkey Vulture, Cathartes aura	Cathartidae	
N/A	800fr	Bearded Vulture, Gypaetus barbatus	Accipitridae **	
N/A	SS 3300fr	Black Vulture, Coragyps atratus	Cathartidae	
	Margin	King Vulture, Sarcoramphus papa	Cathartidae	
** Eng	lish name ch	nanged from Lammergeier		
		2019 November 5 (Kite bird spec	ies) (Set/4. SS/1)	ΑZ
N/A	800fr	Black Kite, Milvus migrans	Accipitridae	
N/A	800fr	Red Kite, Milvus milvus	Accipitridae	
N/A	800fr	Swallow-tailed Kite, Elanoides forficatus	Accipitridae	
N/A	800fr	Black-winged Kite, Elanus caeruleus	Accipitridae	
N/A	SS 3300fr	Brahminy Kite, Haliastur indus	Accipitridae	
	Margin	RS: Red Kite, Milvus milvus	Accipitridae	
		LL: Black-winged Kite, Elanus caeruleus	Accipitridae	
TUVA	TUVALU 2019 September 18 (Sea birds) (Set/4, SS/1)			
1456a	\$1.00	Bristle-thighed Curlew, Numenius tahitiensis	Scolopacidae	
1456b	\$2.00	Red-footed Booby, Sula sula	Sulidae	
1456c	\$3.00	Great Crested Tern, Thalasseus bergii	Laridae	
1456d	\$4.00	Pacific Reef-Heron, Egretta sacra	Ardeidae	
1457	SS \$7.00	Black-naped Tern, Sterna sumatrana	Laridae	

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NEW BIRDS IN THE PHILATELIC AVIARY

Charles E. Braun, BU1364

Corrections

Lavender Waxbill was on a 2011 issue from Liberia. Cape Sparrow was on a 1988 issue from Lesotho.

New Birds



the World, Volume 2.

EASTERN MARSH-HARRIER, Circus spilonotus Accipitridae Raratonga-Cook Island, 2019, 1621, \$2.50

Length: 19 to 22 inches, migratory. The male (shown on the stamp) is blackish above and black-streaked white below with a streaked white collar; the female is brown with dark streaking on the crown and nape.

Habitat: Marshes, swamps, reedbeds and paddyfields.

Range: Breeds from southeastern Siberia to northern Japan and New Guinea:

winters from southern Japan to the Philippines and New Guinea

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



LEVANT SPARROWHAWK, Accipiter brevipes Accipitridae

Raratonga-Cook Island, 2018, 1645, \$2.50

Length: 13 to 15 inches, migratory. The male (shown on the stamp) is dull blue-gray above and reddish-barred pale below; the female is brownish-gray above and heavily barred pale below.

Habitat: Wooded plains and foothills.

Range: Breeds from southeastern Europe to Kazakhstan and Iran; winters in sub-

Sahara Africa.

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

the World, Volume 2.

SERENDIB SCOPS-OWL, Otus thilohoffmanni Strigidae

Sri Lanka, 2020, not yet cataloged, 15r

Length: 6 inches, sexes similar, resident. Black-spotted rufescent, paler below, with an ill-

defined facial disc.

Habitat: Wet rainforest.

Range: Southwestern Sri Lanka.

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

Special Volume.



WHISKERED SCREECH-OWL, Megascops trichopsis Strigidae Aitutaki, 2019, 697, \$22.40

Length: 7 inches, sexes alike, resident. Black-streaked gray-brown or rufous above and barred pale below, with a pale gray or rufous facial disc.

Habitat: Dense oak groves.

Range: Southeastern Arizona to north-central Nicaragua.

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

the World, Volume 5.



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15.00



SOLOMON ISLAND FROGMOUTH, Podargus inexpectatus Podargidae Split from

Marbled Frogmouth which is no longer in the aviary.

Solomon Islands, 2004, 984e, \$5

Length: 15 inches, sexes alike, resident. Deep rufous with bold white spots.

Habitat: Forest and forest edges. Range: Northern Solomons.

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

World, Volume 5.



RUFOUS-CHEEKED NIGHTJAR, *Caprimulgus rufigena* Caprimulgidae Angola, 2019, not yet cataloged, 300kz

Length: 10 inches, migratory. The male (shown on the stamp) is black-streaked grayish-brown above and grayish-spotted buff below, with a white throat patch, a white-tipped tail and a white spot near the wing tip; the female lacks the wing spots and the white-tipped tail

Habitat: Open wooded savanna, clearings and scrubland.

Range: Breeds from Botswana and Angola to South Africa; winters in Nigeria and

Cameroon.

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



FIERY-CHEEKED NIGHTJAR, *Caprimulgus pectoralis* Caprimulgidae Angola, 2019, not yet cataloged, 300kz

Length: 10 inches, resident, The male (shown on the stamp) is dark brown above, variegated grayish-brown and brownish-white and speckled brown below with white spotted wings and a buff collar; the female has smaller buff wing spots.

Habitat: Woodlands and savanna.

Range: Angola and southeastern Kenya to South Africa.

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

World, Volume 5.



SWAMP NIGHTJAR, Caprimulgus natalensis Caprimulgidae

Angola, 2019, not yet cataloged, 300kz

Length: 8 to 10 inches, resident. The male (shown on the stamp) is spotted brown above and buff-spotted brown below, with a white spot near the wingtip; the female lacks the wing spot and has a white outer tail.

Habitat: Wetlands and forest edges.

Range: Eastern Gambia and southwestern Ethiopia to southeastern South Africa. Reference: del Hoyo, J., A. Elliott and J. Sargatal, Eds. Handbook of the Birds of the

World, Volume 5.

MANY-SPOTTED HUMMINGBIRD, *Taphrospilus hypostictus* Trochilidae

Sierra Leone, 2019, not yet cataloged, 12500Le

Length: 4.5 inches, sexes similar, resident. Green above and heavily green-spotted white below.

Habitat: Forest and forest edges.

Range: Eastern Ecuador to southwestern Brazil.

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





SULAWESI HORNBILL, Penelopides exarhatus Bucerotidae

Central African Republic, 2019, not yet cataloged, 900fr

Length: 18 inches, resident. The male (shown on the stamp) is black with a white or yellow face and throat; the female is all black.

Habitat: Lowland forest. Range: Sulawesi. Indonesia.

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

Volume 5.

WRITHED HORNBILL, Aceros leucocephalus Bucerotidae

Central African Republic, 2019, not yet cataloged, 900fr

Length: 22 to 24 inches, resident. The male (shown on the stamp) is black, with a black-tipped white tail and a white face, neck and upper breast; the female has a black face to breast.

Habitat: Lowland primary evergreen forest.

Range: Mindanao, Philippines.

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

Volume 5.



KNYSA WOODPECKER, Campethera notata Picidae

South Africa, 2020, not yet cataloged, *

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

Habitat: Forest, woodlands and dense bush.

Range: Southern South Africa.

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



OLIVE WOODPECKER, Chloropicus griseocephalus Picidae

South Africa, 2020, not yet cataloged, *

Length: 8 inches, resident. The male (shown on the stamp) is olive-green above and darkish gray below, with a red hindcrown, nape and rump and a golden tinge on the breast; the female lacks the red on the head.

Habitat: Forest, woodlands and thickets.

Range: Southwestern Uganda to Namibia and southern and eastern South Africa.

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

7.

BLYTH'S PARADISE FLYCATCHER, Terpsiphone affinis

Monarchidae

Togo, 2019, not yet cataloged, 3300fr Margin

Length: 8 inches (female) and 12 inches (male), resident. The male (on the left) is chestnut above and dark gray below, with a dark gray head, whitish belly and long tail; the female (on the right) is duller with a short square-tipped tail.

Habitat: Forest and mangroves.

Range: Peninsular Malaysia and Sumatra.

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

Birds of the World, Volume 11.





SHARPE'S LONGCLAW, Hemimacronyx sharpei Motacillidae

Sierra Leone, 2019, not yet cataloged, 12500Le

Length: 7 inches, resident. The male (shown on the stamp) is scaly olive-brown above and deep lemon-yellow below with brownish-black streaks on the breast and a lemon-yellow

supercilium; the female is pale yellow below and has a white supercilium.

Habitat: Grassy highlands.

Range: Western and central Kenya.

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

METALLIC STARLING, Aplonis metallica Sturnidae

Togo, 2019, not yet cataloged, 800fr Previously on a 2005 Australian envelope.

Length: 10 inches, sexes alike, resident. Glossy purple above and glossy green below, with an

emerald-green rump and red iris

Habitat: Forest, clearings and mangroves.

Range: Moluccas to the Solomons and northeastern Australia.

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

Volume 14.





AFRICAN GOLDEN WEAVER, Ploceus subaureus Ploceidae

Togo, 2019, not yet cataloged, 800fr

Length: 6 inches, resident. The male (shown on the stamp) is greenish yellow above and yellow below with a red iris; the female has a greenish crown and a dark brown iris.

Habitat: Coastal plains and along rivers.

Range: Southeastern Kenya to southeastern South Africa.

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, not yet cataloged, 3300fr

Length: 6 inches, resident, The male (shown on the stamp) 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

15.

AUDUBON'S WARBLER, Setophaga coronata auduboni Parulidae

Mozambique, 2016, not yet cataloged, 66mt

Length: 6 inches, sexes similar, migratory. Gray above and black-streaked white below, with a yellow throat, shoulders and rump.

Habitat: Highland coniferous and pine-oak forest.

Range: Breeds from western Canada to northwestern Mexico; winters from southeastern USA to Honduras.

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



The other two issues of Yellow-rumped Warbler (British Virgin Islands 2003 and St. Pierrre & Miquelon 2007) show Myrtle Warbler, *Setophaga coronata*, *coronata*, which has a white throat. It occurs in forests and woodlands. It breeds in southern Canada and from Minnesota to New England and winters in the southeastern USA, eastern Middle America, the Caribbean and Bermuda.



ENTOMOLOGY

Editor

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



New Listings

Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
COOK IS	5.	2020		
a	50c	Richmond Birdwing, Troides priamus richmondia Gray	PAP, Papilioninae	A
b	\$1	Freyer's Purple Emperor, Apatura metis Freyer	NYM, Apaturinae	A
c	\$5	Sapho Longwing, Heliconius sapho Drury	NYM, Heliconiinae	A
d	\$7	Spicebush Swallowtail, Papilio troilus L.	PAP, Papilioninae	A
a	\$10	Silvery Blue, Glaucopsyche lygdamus Doubleday	LYC, Polyommatinae	A
b	\$20	Saturn, Zeuxidia amethystus Butler	NYM, Morphinae	A
c	\$30	Common Banded Peacock, Papilio crino Fabr.	PAP, Papilioninae	A
d	\$34.70	Monarch, Danaus plexippus L. Also in margin	NYM, Danainae	AZ
a	\$10	Question Mark, Nymphalis interrogationis Fabr.	NYM, Nymphalinae	A
b	\$20	Thick-tipped Greta Glasswing, Greta morgane oto Hewitson. &	in margin NYM, Danai	nae AZ
c	\$30	Common Buckeye, Junonia coenia Hubner	NYM, Nymphalinae	A
d	\$34.70	Ceylon Rose, Atrophaneura jophon Gray	PAP, Papilioninae	A
CYPRUS		2020 February 12		
	34c	Black-veined White, Aporia crataegi L.	PIE, Pierinae	A
	41c	Old World Swallowtail, <i>Papilio machaon</i> L., ♀	PAP, Papilioninae	A
	64c	Levantine Leopard, Cigaritis acamas cypriaca Riley	LYC, Theclinae	A
ISRAEL		2020 April 21		
a	4.10s	Hairy-footed Digger Bee, Anthophora plumipes Pallas	API, Apinae	A
b		Western Honeybee, Apis mellifera L.	API, Apinae	A
c		Large Earth Bumblebee, <i>Bombus terrestris</i> L.	API, Apinae	A
JAPAN		2019 February 20	·	
4275c	62¥	Flowers & Butterflies	Lepidoptera	C
4276b	82¥		Lepidoptera	Č
.2700	021	2019 October 23	zepraeptera	C
4351c	62¥	Ladybird Beetles	Coccinellidae	A
		·		
KAZAKI		2019 December 11	DAD Danilianina	
901a	280te	, 1	PAP, Papilioninae	A
901b	280te	Southern Festoon, Zerynthia polyxena Denis & Schiffermuller	PAP, Parnassiinae	A
901c	280te	Scarce Swallowtail, <i>Iphiclides podalirius</i> L.	PAP, Papilioninae	A
901d	280te	Esper's Marbled White, Melanargia russiae Esper	NYM, Satyrinae	A
901e		Red Admiral, Vanessa atalanta L.	NYM, Nymphalinae	A
901f	280te	Large White, Pieris brassicae L.	PIE, Pierinae	A
LIECHT	ENSTEI	N 2020 March 2		
	85rp	White Featherleg, Platycnemis latipes Rambur	PLA, Platycnemidinae	A
	130rp	Red-veined Darter, Sympetrum fonscolombii Selys	LIB, Sympetrinae	A
	180rp	Scarlet Darter, Crocothemis erythraea Brulle	LIB, Sympetrinae	A

LIECH	ΓENSTEI	N (continued)		
		Spotted Darter, Sympetrum depressiusculum Selys	LIB, Sympetrinae	A
PENRH	YN IS.	2020		
		Large Marble, Euchloe ausonoides Lucas	PIE, Pierinae	A
	\$1	Luzon Peacock Swallowtail, <i>Papilio chikae</i> Igarashi	PAP, Papilioninae	Α
	\$5	Common Morpho, Morpho helenor peleides Kollar	NYM, Morphinae	Α
	\$7	Banded Orange Herliconian, Dryadula phaetusa L.	NYM, Heliconiinae	A
		ear as a sheet of 8 with 2 of each of the above and as an sheet of	4.	
However	r, D. phaet	usa is mis-captioned as Pachliopta jophon in both of the sheets.		
SRI LA	NKA	1920 March 3		
	L, 15r	Common Rose, Atrophaneura hector L.	PAP, Papilioninae	A
SWITZ	ERLAND	2020 January 24		
	85c.	Japanese Beetle, Popillia japonica Newman	SCA, Rutelinae	A
		Beyond The Catalog		
		(Issues of doubtful validity)		
CENTR	AL AFRI	CAN REP. 2020 January 27 (Stamperija CA-	200112a&b)	
a,	850fr	Common Blue, <i>Polyommatus icarus</i> Rottemburg	LYC, Polyommatinae	A
b,	850fr	Tailed Jay, Graphium agamemnon L.	PAP, Papilioninae	A
c,	850fr	Monarch, Danaus plexippus L.	NYM, Danainae	A
d,	850fr	Menelaus Blue Morpho, Morpho menelaus L.	NYM, Morphinae	A
	22000	Each of above also in panes of 10 with one of above in margins	D. D. D	
		Old World Swallowtail, <i>Papilio machaon</i> L.	PAP, Papilioninae	A
	Margin	LL: Silvery Demon Charaxes, Charaxes catachrous van Somere	NYM, Charaxinae	Z
		UR: Blue Pansy, Junonia orithya L.	NYM, Nymphalinae	Z
		LR: Common Birdwing, Troides helena L.	PAP, Papilioninae	Z
		2020 January 27 (Bee-Eater Birds) (Stam		
c	850fr	Bee in bird's beak. Also in margin of pane of 10	Apidae	SC
·	3300fr	No insect	ripidue	50
	Margin	LL: Dragonfly in bird's beak	Odonata	SC
	Č	UR & Bottom: Bee in bird's beak	Apidae	SC
		2020 January 27 (Stamperija CA-	200115a&b)	
	4x900fr	Western Honeybee, <i>Apis mellifera</i> L., API, Apinae. Also in par	*	A
	3600fr	Western Honeybee, Apis mellifera L., API, Apinae. Also in ma		A
CHAD		2020 February 24 (Stamperija TC	H-200105a&b)	
a	800fr	Apollo, Parnassius apollo L.	PAP, Parnassiinae	A
b	800fr	Woodland Grayling, Hipparchia fagi Scopoli	NYM, Satyrinae	A
c	800fr	Red Admiral, Vanessa atalanta L.	NYM, Nymphalinae	A
d	800fr	Clouded Apollo, Parnassius mnemosyne L.	PAP, Parnassiinae	A
	3300fr	Marbled White, Melanargia galathea L.	NYM, Satyrinae	A
	Margin:	Checkered Swallowtail, Papilio demoleus L. In margin with ch		7
			PAP, Papilioninae	Z
	0.000	2020 February 24 (Stamperija TC	· · · · · · · · · · · · · · · · · · ·	
a 1-	800fr	Large Bee-fly, Bombylius major L,	BOM, Bombyliinae	A
b	800fr	Western Honeybee, Apis mellifera L.	API, Apinae	A
c	800fr	Giant Honeybee, Apis dorsata Fabr.	API, Apinae	A

d	3300fr	Neon Cuckoo Bee, <i>Thyreus nitidulus</i> Fabr. Buff-tailed Bumblebee, <i>Bombus terrestris</i> L. Big Mining Bee, <i>Colletes daviesanus</i> Smith	API, Xylocopinae API, Apinae COL, Colletinae	A A
GUINE	25,000fr	2008 November 17 (Fields Medal Eastern Tiger Swallowtail, Papilio glaucus L. Old World Swallowtail, <i>Papilio machaon</i> L.) (Stamperija GU-0876a) PAP. Papilioninae PAP, Papilioninae	B Z
GUINE	A-BISSAU	• \ 1 3		
		Monarch, Danaus plexippus L.	NYM, Danainae	A
		Orange Oakleaf, Kallima inachus Boisduval	NYM, Nymphalinae	A
		Old World Swallowtail, <i>Papilio machaon</i> L.	PAP, Papilioninae	A
		Thick-tipped Greta Glasswing, Greta morgane oto Hewitson	NYM, Danainae	A
		in pane of 8 & label of Large Tree Nymph, <i>Idea leuconoe</i> Erich		U
& 3		in margins of each pane	Lepidoptera	Z
	3000fr	Large Tree Nymph, <i>Idea leuconoe</i> Erichson	NYM, Danainae	A
	Margin:	2 Blue Monarchs, <i>Tirumala limniace</i> Cramer	NYM, Danainae	Z
LIBER	IA	2020 January 6 (Stamperija LIB-	200104a&b)	
a	\$200	Brimstone, Gonepteryx rhamni L.	PIE, Coliadinae	A
b	\$200	Mourning Cloak, Nymphalis antiopa L.	NYM, Nymphalinae	A
c	\$200	Adonis Blue, Polyommatus bellargus Rottemburg	LYC, Polyommatinae	A
d	\$200	Marbled White, <i>Melanargia galathea</i> L.	NYM, Satyrinae	Α
e	\$200	Mustard White, <i>Pieris napi</i> L.	PIE, Pierinae	A
f	\$200	Orange Tip, Anthocharis cardamines L.	PIE, Pierinae	A
	\$1200	Purple Emperor, Apatura iris L.	NYM, Apaturinae	A
	Margin	UL: Painted Lady, Vanessa cardui L.	NYM, Nymphalinae	Z
		LL & MR: Old World Swallowtail, <i>Papilio machaon</i> L.	PAP, Papilioninae	Z
MALD	IVE ISLA	NDS 2020 February 12 (All dated 2019) (Stan	nperija MLD-191004a&b)	
a	22r	Common Eggfly, <i>Hypolimnas bolina</i> L.	NYM, Nymphalinae	A
b	22r	Cairns Birdwing, Troides priamus euphorion Gray	PAP, Papilioninae	Α
c	22r	Menelaus Blue Morpho, Morpho menelaus L.	NYM, Morphinae	Α
d	22r	Tailed Jay, Graphium agamemnon L.	PAP, Papilioninae	A
	Margin	L: Part of Butterfly	Lepidoptera	Z
		M-Top: Wing tip of Butterfly	Lepidoptera	Z
		UR: Wing tip of Butterfly	Lepidoptera	Z
		R: Tailed Jay, Graphium agamemnon L.	PAP, Papilioninae	Z
	70r	Orange Lacewing, Cethosia penthesilea Cramer	NYM, Heliconiinae	A
	Margin:	Asian Swallowtail, <i>Papilio xuthus</i> L.	PAP, Papilioninae	Z
		2020 April 12 (Stamperija MLD-1	91113a&b)	
a	20r	Asian Giant Hornet, Vespa mandarinia Smith	VES, Vespinae	Α
b	20r	Western Honeybee, Apis mellifera L. Also many in selvage	API, Apinae	A
c	20r	Little Honeybee, Apis florea Fabr.	API, Apinae	Α
d	20r	Yellow-legged Hornet, Vespa velutina Lepeletier	VES, Vespinae	A
	60r	Large Earth Bumblebee, <i>Bombus terrestris</i> L.	API, Apinae	A
	Margin:	European Hornet, Vespa crabro L.	VES, Vespinae	Z
NIGER		2019 December 20 (Stamperija N	(G-190623a&b)	
a	800fr	Apollo, Parnassius apollo L.	PAP, Parnassiinae	A
b	800fr	Two-tailed Pasha, <i>Charaxes jasius</i> L.	NYM, Charaxinae	A
c	800fr	Spotted Fritillary, Melitaea didyma Esper	NYM, Nymphalinae	A
d	800fr	Banded Peacock, Papilio palinurus Fabr.	PAP, Papilioninae	A

	3300fr Margin	Southern Festoon, <i>Zerynthia polyxena</i> Denis & Schiffermuller LR: Red & Black Swallowtail, <i>Parides photinus</i> Doubleday PAI UR: Butterfly MR: Swallowtail Butterfly	PAP, Papilioninae P, Papilioninae Lepidoptera PAP, Papilioninae	A A Z Z
ST. TH	OMAS & 1	PRINCE IS. 2019 December 20 (Stamperija ST	-190804a&b)	
a	31,000d	Blue Lacewing, Cethosia cyane Drury	NYM, Heliconiinae	Α
b	31,000d		NYM, Danainae	Α
c	31,000d	Common Rose Butterfly, Atrophaneura aristolochiae Fabr.	PAP, Papilioninae	A
d	31,000d	Thick-tipped Greta Glasswing, Greta morgane oto Hewitson	NYM, Danainae	A
	Margin:	Parts of 14 Butterflies	Lepidoptera	Z
	124,000d		PAP, Papilioninae	Α
	Margin	LL: Blue Nawab, <i>Polyura schreiber</i> Godart	NYM, Charaxinae	\mathbf{Z}
		MR: Zebra Blue, Leptotes plinius Fabr.	LYC, Polyommatinae	Z
		2020 February 4 (Stamperija ST-20	00113a&b)	
a	31,000d	Neon Cuckoo Bere, <i>Thyreus nitidulus</i> Fabr.	API, Xylocopinae	A
b	31,000d	Asiatic Honeybere, Apis cerana Enderlein	API, Apinae	A
c	31,000d	Buff-tailed Bumblebee, Bombus terrestris L.	API, Apinae	A
d	31,000d	Violet Carpenter Bee, <i>Xylocopa violacea</i> L.	API, Xylocopinae	A
	124,000d	Western Honeybee, Apis mellifera L. Also in LL margin	API, Apinae	AZ
	Margin	R: Buff-tailed Bumblebee, <i>Bombus terrestris</i> L.	API, Apinae	Z
TOGO		2020 February 28 (Stamperija TG-	200107a&b)	
a	800fr	Pipevine Swallowtail, Battus philenor L., at L	PAP, Papilioninae	В
		Common Rose, Atrophaneura aristolochiae Fabr., at R	PAP, Papilioninae	В
b	800fr	African Monarch, Danaus chrysippus L., at UL	NYM, Danainae	В
		Menelaus Blue Morpho, Morpho menelaus L., at LR	NYM, Morphinae	В
c		Mustard White, <i>Pieris napi</i> L.	PIE, Pierinae	A
d	800fr	, I	PAP, Papilioninae	A
	3300fr	Thick-tipped Greta Glasswing, Greta morgane oto Hewitson	NYM, Danainae	A
	Margin	Top: Blue Emperor, Papilio ulysses L.	PAP, Papilioninae	Z
		LR: Old World Swallowtail, <i>Papilio machaon</i> L.	PAP, Papilioninae	Z
		2020 February 28 (Stamperija TG-	200123a)	
d	800fr	Moth in bee-eater bird's beak	Lepidoptera	CS

Insect New Issues for 2019

Cataloged insect stamps: 347
Non-cataloged (Stamperija): 293
Total insect stamps 2019: 640

MICHEL DINOSAUR CATALOGUE REVIEW

Michael Kogan, BU1863, & Dr. Peter J. Voice, BU1891

In April 2019, Germany-based MICHEL stamp catalog (*MICHEL-Briefmarken-Katalog*) announced their first topical catalogue devoted to prehistoric animals, *Dinosaurs – Whole World* (Dinosaurier – Ganze Welt).

Unfortunately, the issue was delayed four times and was finally published at the end of December 2019, instead of the beginning of May, as was announced initally.

The catalogue contains 160 pages in A5 paperback format (8.27×5.83 in) with approximately 2,500 color illustrations and about 20,000 price quotations. New issues up to MICHEL Rundschau 11/2019 have been included in this edition.

The first confusion starts on the cover of the catalogue as it shows not only reconstructions and fossils of dinosaurs, but also some other prehistoric animals (mammals) that are not dionsaurs.

The editors explain this in the introduction section, by saying that the catalogue includes not only dinosaur stamps, but also stamps of some other prehistoric and extinct animals such as mammoths, sabretooth cats, and dodos.

Regrettably, the catalogue does not list all the stamps that have been issued depicting dinosaurs and other prehistoric animals, mostly fossils.

Here are a few examples of missing items:



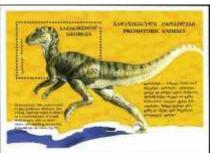
Dinosaur stamp of Argentina (Mi#3601) & (Sc#2758) from a "Argentina in Antarctica" set issued in 2015.

Three Israeli stamps from 2000 (Mi#1576–78) & (Sc#1423a) issued in a strip inside a very nice MS/9.

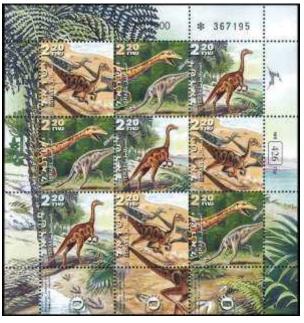
Souvenir sheets from a Moldova set of extinct animals issued in 2016 (Mi#Bl.75) & (Sc#928), and a 1995 Georgia set of prehistoric animals (Mi#Bl.3) & (Sc#136) are missing. Only

the regular stamps are listed in the catalogue.









The 1993 MS/6 from Malawi (Mi#Bl.77) & (Sc#623) is listed separately from the three single stamps that belong to the same set.

This MS/6 is incorrectly listed as issued in 2019, while the stamps are listed in the 1993 year section.

In total, more than 50 stamp sets of dinosaurs and other prehistoric animals are missing from the catalogue. Perhaps some sets of extinct animals are missing too.

The catalog contains listings for some issues that probably are illegal.

Afghanistan 1998 (Mi#1784–90). According to the Universal Postal Union (UPU) Circular No. 345 dated 21 August 2000, no new stamps were issued in the country between 1989 and 2000, when the country was ruled by the Taliban. A note in the *Scott Catalogue* indicates that this set of six stamp plus a souvenir sheet are "false stamps" according to the President of the Afghanistan Postal Administration.

Democratic Republic of Congo dated 2003–2013. According to the UPU WNS stamps website, no stamps were issued in the country during this period.

To my surprise, the catalogue lists two French stamps with prehistoric animals depicted on cave paintings. I am not sure they belong to this topic, but if the editors think they do, then they should include many other such stamps that have been issued.

The same goes for two Canadian stamps (Mi#3289–90) & (Sc#2857a/2758) that show a landscape of Dinosaur Provincial Park in Alberta, Canada. There are many additional landscape stamps showing fossil discovery sites issued worldwide.

Conclusion: The catalogue is a nice help for beginners as it provides an overview of existing stamps and gives an idea of market prices. Its size enables you to carry it in small bag to stamp shows or swap events and use it as a reference for exchange. However, as it is incomplete, advanced collectors have to cross check it with other resources such as this website (http://www.paleophilatelie.eu/), the most comprehensive online resource about paleontology and paleoanthropology in philately.

For the interested reader, here is a list of reference books on prehistoric life on stamps:

Baldwin, Stuart and Beverly Halstead. *Dinosaur Stamps of the World*. Baldwin's Books, Essex, United Kingdom, 1991. [Comprehensive when it was published, but focused on vertebrates.]

Domingo I Gimeno, Jordi, *Prehistorics and Fossils, Thematic Stamp Catalogue*, 25th edition. Domfil, 2003, 172 p. [Very comprehensive, well-organized, well-illustrated, and multi-lingual treatment of prehistoric life stamps from ~2000 and prior.]

Feldman, V.I. *Philatelic Geology*. Ministry of the Natural Resources of Russia and Russian Geological Society, Moscow, Russia, 2000. [Bilingual book that covers mostly geological themes, but has a nice chapter on prehistoric life with some illustrations of first day covers and other philatelic materials honoring Russian paleontologists as well as a diverse array of prehistoric life stamps. Not comprehensive.]

Shuker, Karl. *Dinosaurs and Other Prehistoric Animals on Stamps – A Worldwide Catalogue*. CFZ Press, United Kingdom, 2008. [Poorly illustrated listing of fossil stamp issues weakened by inclusion of cryptozoological stamp issues.]

And a few reference books that focus on more specialized groups. (Note: These three are all bilingual German-English texts.):

Ernst, Hans Ulrich and Frank Rudolph. *Trilobiten weltwiet: Die Welt der Dreilapper und ihr Speigelbild in der Philatelie*. Verlag Friedrich Pfeil, Munich, Germany, 2002. [Comprehensive treatment of trilobites on stamps.]

Ernst, Hans Ulrich and Christian Klug. Perlboote und Ammonshörner weltweit: Die Welt der Kopffüßer und ihr Spiegelbild in der Philatelie. Verlag Friedrich Pfeil, Munich, Germany, 2011. [Comprehensive treatment of ammonoids and nautiloids on stamps.]

Ernst, Hans Ulrich and Oliver Hampe. Fossile Fische weltweit: Die Welt der prähistorischen Fische und ihr Spiegelbild in der Philatelie. Verlag Friedrich Pfeil, Munich, Germany, 2018. [Comprehensive treatment of fossil fish on stamps.]



PALEONTOLOGY

Editor Michael Kogan, BU 1863



New Listings

Scott#	Denom	New Listings Common Name/Scientific Name	Family/Subfamily	Code
BENIN		2019		
	on 50fr.	Dimorphodon sp	Dimorphodontidae	A
		Eryops megacephalus	Eryopidae	A
REPUBLIQUE POSTES 1996	E DU BENIN	POSTES REPUBLIQUE DU BENIN 150 F 1004	UE DU BENIN 1998 —40F	
150f	r on 75fr.	Dunkleosteus sp	Dunkleosteidae	A
135	fr on 40fr	Longisaurus sp.	Sphenacodontidae?	A
These are	e two more	e of the same 1996 set, overprinted in 2000. These are not liste	d in catalogs.	
CENTR	AL AFRI	CAN REPUBLIC 2020 January 27 (Dinosaurs) (set	of 4 & S/S 1) ^{1[*1]}	
		Ceratops horridus	Ceratopsidae	A
	850fr	Diplodocus longus	Diplodocidae	A
	850fr	Tyrannosaurus rex	Tyrannosauridae	A
	850fr	Allosaurus fragilis	Allosauridae	A
S	SS 3300fr	Stegosaurus stenops	Stegosauridae	A
	Margin	: Tyrannosaurus rex; Ceratops horridus	As above	Z
GUINE	A BISSAU	2020 February 7 (Shell and Fossi	(ls) (set of 4 & S/S 1) ^[*1]	
		Elrathia kingii	Allokistocaridae	A
		Venus Comb Murex, Murex pecten	Muricidae	A
	500fr	Keichousaurus hui	Keichousauridae	A
		Fighting Conch, Strombus pugilis	Strombidae	A
	750fr	Tyrannosaurus rex	Tyrannosauridae	A
		Turritella terebr	Turritellidae	A
		Trilobites	Class Trilobita	A
5	SS 3000fr	Chambered or Pearly Nautilus, <i>Nautilus pompilius</i>	Nautilidae	A
		Ammonite nautilus	Order Ammonitida	A
		Margin: Tyrannosaurus re	Tyrannosauridae	Z
		Queen Conch, Lobatus gigas	Strombidae	\overline{Z}
HUNGA	RV	2020 March 4 (The Bakony Dinosaurs	(II)) $(M/S of 6)$	
	200f	Hungarobatrachus szukacsi	Order Ranoidea	A
	200f	Mochlodon vorosi	Rhabdodontidae	A
	200f	Bauxitornis mindszentyae	Avisauridae	A
_		200000000000000000000000000000000000000	11100011000	**

HUN	GARY (conti	inued)			
11011	200f	Atractosteus sp		Lepisosteidae	Α
	200f	Side-necked Turtle, Foxemys trabanti		Bothremydidae	A
	200f	Doratodon carcharidens		Suborder Notosuchia	A
	2001	Sold for 200f each on the date of issue			
LIBE	CRIA	2020 January 3	(Dinosaurs) (M/S	of 4 & S/S 1) ^[*1]	
a.	\$200	Einiosaurus procurvicornis	(Dinosaars) (W/S	Ceratopsidae	A
b.	\$200	Parasaurolophus walkeri		Hadrosauridae	A
c.	\$200	Apatosaurus ajax		Diplodocidae	A
d.	\$200	Stegosaurus stenop		Stegosauridae	A
e.	\$200	Coelophysis bauri		Coelophysidae	A
f.	\$200	Pachycephalosaurus wyomingensis		Pachycephalosauridae	A
	SS \$1200	Tyrannosaurus rex		Tyrannosauridae	A
	25 41200	Margin: Parasaurolophus walkeri; Apatosa	aurus aiax	As above	Z
MAI	DIVE IS.	2020 February 12	(Dinosaurs) (M/S o		_
1,1111	20r	Stegosaurus stenops	(11175)	Stegosauridae	A
		Eudimorphodon ranzii		Eudimorphodontidae	A
	20r	Pteranodon longiceps		Pteranodontidae	A
		Ceratops horridus		Ceratopsidae	A
	20r	-		Tyrannosauridae	A
	-	Dilophosaurus wetherilli		Dilophosauridae	Α
	20r	Ankylosaurus magniventris		Ankylosauridae	A
	-	Utahraptor ostrommaysi		Dromaeosauridae	Α
	SS 60r	Velociraptor mongoliensis		Dromaeosauridae	A
		· -	zii;	As above	Z
	Č	Ceratops horridus; Tyrannosaurus rex	,		
		2020 February 12	(Shells and Fossils	$(M/S \text{ of } 4 \& S/S 1)^{[*1]}$	
	20r	Nautilus belauensis	`	Nautilidae	A
	20r	Ammonite fossil		Ammononitida	A
	20r	Mesosaurus sp. fossil		Mesosauridae	A
	20r	Giant Clam, <i>Tridacna giga</i>		Cardiidae	A
	SS 60r	Strombus gigas		Strombidae	A
	Margin:	Trilobite fossil		Class Trilobita	Z
		2020 February 12	(Flying Dinosaurs)	$(M/S \text{ of } 4 \& S/S 1)^{[*1]}$	
"Flyi	ng Dinosaurs"	'is the wrong term. Dinosaurs are terrestrial			
	d be "Flying I		•		
	22r	Quetzalcoatlus northropi		Azhdarchidae	A
	22r	Tapejara wellnhoferi		Tapejaridae	A
	22r	Cearadactylus atrox		Order Pterodactyloidea	A
	22r	Rahonavis ostromi		Dromaeosauridae?	Α
	SS 70r	Dimorphodon macronyx		Dimorphodontidae	Α
		Anurognathus ammoni		Anurognathidae	A
	Margin:	Cearadactylus atrox		Order Pterodactyloidea	Z
		Sordes pilosus		Ramphorhynchidae	Z
ST.	ГНОМАЅ &	PRINCE IS. 2020 February 4	(Dinosaurs) (M/S	of 4 & S/S 1) ^[*1]	
	1,00d	Apatosaurus ajax		Diplodocidae	A
	31,00d	Deinonychus antirrhopus		Dromaeosauridae	A
	31,00d	Dicraeosaurus hansemanni		Dicraeosauridae	Α

ST. THOMAS & PRINCE IS. (continued)

31,00d	Gigantspinosaurus sichuanensis		Stegosauridae?	Α	
Margin: Brachylop		Hadrosauridae	A		
124,00d	Brachylophosaurus canadensis		Hadrosauridae	A	
	Margin: Apatosaurus ajax; Deinonychus antirr	hopus;			
	Dicraeosaurus hansemanni; Gigantspinosauru	s sichuanensis	As above	Z	
SIERRA LEONE	2020 January 30 (D	oinosaurs) (M/S c	of 4 & S/S 1) ^[*1]		
10000le	Brachiosaurus altithorax		Brachiosauridae	A	
	Pteranodon longiceps		Pteranodontidae	A	
10000le	Spinosaurus aegyptiacus		Spinosauridae	A	
10000le	Allosaurus fragilis		Allosauridae	A	
10000le	Tyrannosaurus rex		Tyrannosauridae	A	
10000le	Triceratops horridus		Triceratopsidae	A	
20000le	Tyrannosaurus rex		Tyrannosauridae	A	
SS 20000le	Triceratops horridus		Triceratopsidae	A	
Margin: Allosaurus fragilis; Brachiosaurus altithorax;					

SLOVENIA 2020 March 13 (MAMMAL FOSSILS IN SLOVENIA: Prohyracodon telleri)

€0.95 Prohyracodon telleri

Pteranodon longiceps

Order Rhioncerotoidea

Due to the fact that *Prohyracodon*, Order Rhioncerotoidea, are known from few fragmentary fossils only, it's impossible to make precise reconstruction of the animal. Perhaps this is the reason for stamp designer to use reconstruction of similar animal: *Hyracodon nebraskensis*, from German book "Phylogenie der Mammalia, Stammesgeschichte der Saeugetiere von Eric Thenius" published in Berlin 1969.



Z

SPAIN 2020 March 23 (Museums) (Set/3)

€1 Museum of Human Evolution of Burgos

This year, three new Spanish museums are the central figures of the series Correos dedicates to the temples of art, history and culture in Spain. The first of the Premium Sheets is dedicated to the Museum of Human Evolution.

Located in the center of Burgos, it was designed by the architect Juan Navarro Baldeweg on a plot where the convent of San Pablo of the Dominican order once stood many centuries back. The museum was included in the declaration of the sites of Atapuerca as a World Heritage Site in 2015. The main aim of the Museum of Human



Evolution is to preserve, map and disclose archaeological remains from the sites of the Sierra de Atapuerca.

As above

The façade of the museum is seen in the stamp's motif, together with an image of the human skull known as Miguelón (classified as either late *Homo heidelbergensis* or as early *Homo neanderthalensis*, both Hominidae. It has been estimated to date to 430,000 years ago.).

TOGO 2020 February (Prehistoric water animals) (M/S of 4 & S/S 1)^[*1]

800fr	Megalodon, Carcharocles megalodon	Otodontidae	A
800fr	Anomalocaris canadensis	Anomalocarididae	A
800fr	Dinichthys terrella	Dinichthyidae	Α
800fr	Liopleurodon ferox	Pliosauridae	A
SS 3300fr	Kronosaurus queenslandicu	Pliosauridae	A
Margin: Co	archarocles megalodon: Dinichthys terrelli: Anomal	ocaris canadensi As above	7.

Stamps of private post companies

Germany 2019 June 25 definitive stamps of Post-Modern, private post operator in Saxony region. €2,50 (letters up to 1kg weight rate)

Bautzen landscape





In 2019 local post company "Post Modern" who operate in Saxony

(Sachsen) region of Germany, issued new definitive stamps with face values from 5 Euro-cent to 2.5 Euro that shows some major sightseeing of the region. Every self-adhesive stamp issued in a booklet of





10.with bigger images on a cover and postal rate table on the reverse side. 2.5 Euro is a price for Maximum letter, with weight between 501gr and 1kg.

One of these stamps shows a Sauropodid dinosaur figure from Dinosaur park at Bautzen.

The park contains over 200 life-size figures of dinosaurs and other prehistoric animals. Many of this animals presented is scenes that helps visitors envisage how they lived and fought for survival in primeval times

Germany 2019 November 21 "Prehistoric times are alive" of "Brief und mehr", private post operator in Saxony region.

€0,70 (domestic letter up to 20gr weight rate) – *Triceratops sp.*, Reprint of two stamps, *Triceratops* and Bisons, from the set of 6 issued in 2017.

Triceratopsidae

A





New stamps use the same design, but new face values (70 cent instead of 60 cent) according to new post rate of domestic letters with weight up to 20gr. Original set of 6 stamps "125 anniversary of Natural History Museum of Muenster (NHMM)" issued on February 1st 2017.

Personalized stamps

Spain October 26 (Fossils of Aragon)

A Ammonite, Albarracinites albarracinensis from Albarracín (Teruel)

Order Ammonitida
A Trilobite, Acadoparadoxides mureroensis from Mureo (Zaragoza)

Skull of marine crocodile, Maledictosuchus riclaensis from Ricla (Zaragoza)

Metriorhynchidae
A Issued by the Society of Friends of the Museum of Natural Sciences of the University of Zaragoza (SAMPUZ)
and Philatelic Association Zaragozana (ASFIZA)

Other stamps to consider

Latvia 2020 February 14 "Unique Exhibits of the Latvian Museum of Natural History" €2,69 Amber

Postmarks

Slovenia 2020 March 13 (MAMMAL FOSSILS IN SLOVENIA: *Prohyracodon telleri*) Used on FDC and reproduced *Prohyracodon telleri*, Order *Rhioncerotoidea* skeleton as shown on the bottom-right side of the stamp.

Spain 2020 March 23 (Museums) used on FDC







Hungary 2020 March 04 (THE WORLD OF THE BAKONY DINOSAURS (II)) used on FDC, shows *Mochlodon vorosi*, Rhabdodontidae, as depicted on the background of the second stamp in the upper row.

Future issues

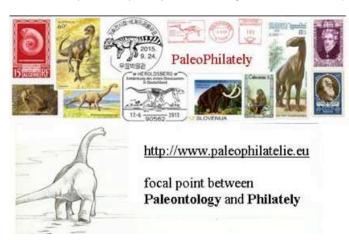
Russia. 2020 June 3 (originally planned for 2020 May 20) - Paleontologic heritage, set of 4 stamps.

Notes:

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

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

Images and description of all stamps mentioned above can be seen on the following website: http://www.paleophilatelie.eu/year/current.html (2020) http://www.paleophilatelie.eu/year/2019.html



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

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

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

Contact: admin@paleophilatelie.eu

Join us on Facebook: PaleoPhilately group

MID-CITIES STAMP CLUB EXPO HAS ORCHID THEME

This annual stamp show in mid-November may be one of the only shows in the US, IF the virus settles down early enough. Their theme this year is "Orchids" and they would appreciate letting the Biology Unit members, who may be interested in exhibiting frames, or just 1 or 4 PAGE exhibits, know about the show. A Prospectus is available from the Biology Unit Secretary.

The two-day show will be on November 13 & 14. The 1 & 4 page exhibits have an entry fee of just one dollar and a cash award will be given to the most popular of each of those categories, as voted on by our attendees. Any exhibit qualifies, not just orchids or flowers. If any members would like to show an exhibit where APS qualified judges will send them a judging sheet to help them improve their exhibit, our frame fees are just \$6 per frame, whether single or multiple frames.

They have only 68 frames, but attract 26 dealers every year and the attendees like the silent auction, the chance board, the kids area and the piles of inexpensive stamps for beginners.

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

ollectors Club of Chicago: Philatelic Encyclopedia. A comprehensive com

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-filatelista.blogspot.com/

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

http://www.tolweb.org/tree

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

http://zipcodezoo.com/

BOTANY

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

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

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

http://www.gardenguides.com/

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

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

ENTOMOLOGY:

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

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

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

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

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

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

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

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

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

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

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

https://entomologytoday.org/

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

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

Natural History Museum. British site containing Lepidoptera generic names and type species listings. http://www.nhm.ac.uk/our-science/data/butmoth/

Odonata Society. German site containing listings of Odonata species found in Europe (in German). http://www.libellula.org/

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

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

HERPETOLOGY:

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

http://amphibiaweb.org/index.html

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

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

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

https://ssarherps.org/

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

http://turtlemeterstamp.altervista.org/

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

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

ICHTHYOLOGY

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

http://www.alltropicalfish.com/

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

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

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

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

MAMMALS

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

http://www.catstamps.org/

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

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

ORNITHOLOGY

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

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

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

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

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

http://www.birdtheme.org/

PALEONTOLOGY:

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

http://www.search4dinosaurs.com/

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

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

GLOSSARY OF TERMS

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

Checklist Codes:

Br	Branch	Α	Subject is the primary design element
FI	Flowers (with or without other plant parts)	В	Subject is only part of the main design
Fr	Fruit (including seeds, nuts, grains, etc.)	С	Subject is a minor representation
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.)	Χ	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:

Acrony	ms 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
bklt	booklet	s/a	self-adhesive
Cap	captioned	Sc#	Scott Catalogue number
CTO	canceled to order	S-0-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	imperforate	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	8	male symbol
NTSS	National Topical Stamp Show	\$	female symbol
NWF	National Wildlife Federation	*	poisonous/venomous symbol

Entomology Family Abbreviations:

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 COC Coccinellidae CORE Coreidae COS Cosmopterigidae CRA Crabronidae CRAM Crambidae CUL Culicidae CUR Curculionidae DER Dermestidae DRO Drosophilidae DYT Dytiscidae ELA Elateridae FOR Formicidae GOM Gomphidae GRA Gracillariidae GRY Gryllacrididae GRYA Gryllacrididae HAL Halictidae HES Hesperiidae HYM Hymenopodidae ICH Ichneumonidae LIM Limacodidae LUC Lucanidae LYC Lycaenidae LIM Limacodidae LUC Lucanidae MAN Mantidae MEG Megachilidae MEL Meloidae MEM Membracidae MIR Miridae MUS Muscidae MYR Myrmeleontidae PAS Passalidae PEN Pentatomidae PAP Papilionidae PAS Passalidae PEN Pentatomidae PAP Papilionidae PAS Passalidae PEN Pentatomidae PAP Papilionidae PAS Passalidae PEN Pentatomidae RAP Rhaphidophoridae RED Reduvidae RIO Riodinidae SCA Scarabaeidae SCO Scoliidae SAT Saturniidae SCA Scarabaeidae SCO Scoliidae SIM Simuliidae SIR Siricidae SPH Sphingidae TAB Tabanidae TEN Tenebrionidae TEP Tephritidae TTEN Tettigoniidae URA Uraniidae VES Vespidae VFO Yponomeutidae URA Uraniidae VES Vespidae	ACR	Acrididae	AES	Aeshnidae	AND	Andrenidae
BRABrahmaeidaeBRACBraconidaeBUPBuprestidaeCALCalopterygidaeCANCantharidaeCARCarabidaeCASCastniidaeCERCerambycidaeCHRChrysomelidaeCHYChrysopidaeCICCicadellidaeCICACicadidaeCOCCoccinellidaeCOECoenagrionidaeCORCorydalidaeCORDCordulegastridaeCORECoreidaeCOSCosmopterigidaeCRACrabronidaeCRAMCrambidaeCULCulicidaeCURCurculionidaeDERDermestidaeDRODrosophilidaeDYTDytiscidaeELAElateridaeFORFormicidaeFULFulgoridaeGEOGeometridaeGEOTGeotrupidaeGOMGomphidaeGRAGracillariidaeGRYGryllidaeGRYAGryllacrididaeHALHalictidaeHESHesperiidaeHYMHymenopodidaeICHIchneumonidaeLAMLampyridaeLASLasiocampidaeLIBLibellulidaeLIMLimacodidaeLUCLucanidaeLYCLycaenidaeLYGLygaeidaeLYMLymantriidaeMANMantidaeMEGMegachilidaeMUSMuscidaeMEMMembracidaeMIRMiridaeMUSMuscidaeMYRMyrmeleontidaeNOCNoctuidaeNOLNolidaeNOTNotodontidaeNYMNymphalidaePENPentatomidae <t< td=""><td>ANO</td><td>Anobiidae</td><td>ANT</td><td>Anthicidae</td><td>API</td><td>Apidae</td></t<>	ANO	Anobiidae	ANT	Anthicidae	API	Apidae
CALCalopterygidaeCANCantharidaeCARCarabidaeCASCastniidaeCERCerambycidaeCHRChrysomelidaeCHRYChrysopidaeCICCicadellidaeCICACicadidaeCOCCoccinellidaeCOECoenagrionidaeCORCorydalidaeCORDCordulegastridaeCORECoreidaeCOSCosmopterigidaeCRACrabronidaeCRAMCrambidaeCULCulicidaeCURCurculionidaeDERDermestidaeDRODrosophilidaeDYTDytiscidaeELAElateridaeFORFormicidaeFULFulgoridaeGEOGeometridaeGEOTGeotrupidaeGOMGomphidaeGRAGracillariidaeGRYGryllidaeGOMGomphidaeGRAGracillariidaeHESHesperiidaeHYMHymenopodidaeICHIchneumonidaeLAMLampyridaeLASLasiocampidaeLIBLibellulidaeLIMLimacodidaeLUCLucanidaeLYCLycaenidaeLYGLygaeidaeLYMLymantriidaeMANMantidaeMEGMegachilidaeMELMeloidaeMEMMembracidaeMIRMiridaeMUSMuscidaeMYRMyrmeleontidaeNOCNoctuidaeNOLNolidaeNOTNotodontidaeNYMNymphalidaePENPentatomidaePAPPapilionidaePASPassalidaePSYPsychodidae <td< td=""><td>ARC</td><td>Arctiidae</td><td>BEL</td><td>Belostomatidae</td><td>BLA</td><td>Blattidae</td></td<>	ARC	Arctiidae	BEL	Belostomatidae	BLA	Blattidae
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 GRU FUL Fulgoridae GRA Gracillariidae GRY Gryllidae HAL Halictidae HES Hesperiidae HYM Hymenopodidae ICH Ichneumonidae LAM Lampyridae LAS Lasiocampidae LIB Libellulidae LIM Limacodidae LYC Lycaenidae LYG Lygaeidae LYG Lygaeidae MEL Meloidae MEM Membracidae MIR Miridae MEL Meloidae MEM Membracidae MIR Miridae MIR Miridae MIR Molidae NOC Noctuidae NOL Nolidae NOT Notodontidae NOC Noctuidae OEC Oecophoridae PAP Papilionidae PAS Passalidae PEN Pentatomidae PAP Papilionidae PAS Passalidae PSY Psychodidae RAP Rhaphidophoridae RED Reduvildae RIO Riodinidae RAP Rhaphidophoridae RED Reduvildae SAT Saturniidae SCA Scarabaeidae SCO Scoliidae SIR Siricidae SPH Sphingidae SPH Sphingidae SPH Sphingidae SIR Siricidae SPH Sphingidae SPR Spriphidae STA Staphylinidae SYR Syrphidae TEN Tenebrionidae TEP Tephritidae TET Tettigoniidae TIP Tipulidae VES Vespidae TRI Trichogrammatidae URA Uraniidae VES Vespidae	BRA	Brahmaeidae	BRAC	Braconidae	BUP	Buprestidae
CHRYChrysopidaeCICCicadellidaeCICACicadidaeCOCCoccinellidaeCOECoenagrionidaeCORCorydalidaeCORDCordulegastridaeCORECoreidaeCOSCosmopterigidaeCRACrabronidaeCRAMCrambidaeCULCulicidaeCURCurculionidaeDERDermestidaeDRODrosophilidaeDYTDytiscidaeELAElateridaeFORFormicidaeFULFulgoridaeGEOGeometridaeGEOTGeotrupidaeGOMGomphidaeGRAGracillariidaeGRYGryllidaeGRYAGryllacrididaeHALHalictidaeHESHesperiidaeHYMHymenopodidaeLIBLibellulidaeLIMLimacodidaeLASLasiocampidaeLIBLibellulidaeLIMLimacodidaeLUCLucanidaeLYCLycaenidaeLYGLygaeidaeLYMLymantriidaeMANMantidaeMEGMegachilidaeMUSMuscidaeMEMMembracidaeMIRMiridaeMUSMuscidaeMYRMyrmeleontidaeNOCNoctuidaeNOLNolidaeNOTNotodontidaeNYMNymphalidaeOECOecophoridaePAPPaplilionidaePASPassalidaePENPentatomidaePHAPhasmatidaePHYPhyllidaePYRGPyrgomorphidaePAPPaplinoidaePPRPyralidaeREDReduviidae <td< td=""><td>CAL</td><td>Calopterygidae</td><td>CAN</td><td>Cantharidae</td><td>CAR</td><td>Carabidae</td></td<>	CAL	Calopterygidae	CAN	Cantharidae	CAR	Carabidae
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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	OEC	Oecophoridae	PAP	Papilionidae	PAS	Passalidae
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	PEN	Pentatomidae	PHA	Phasmatidae	PHY	Phylliidae
PYRGPyrgomorphidaeRAPRhaphidophoridaeREDReduviidaeRIORiodinidaeROMRomaleidaeSARSarcophagidaeSATSaturniidaeSCAScarabaeidaeSCOScoliidaeSCUScutelleridaeSESSesiidaeSILSilphidaeSIMSimuliidaeSIRSiricidaeSPHSphingidaeSPHESphecidaeSTAStaphylinidaeSYRSyrphidaeTABTabanidaeTENTenebrionidaeTEPTephritidaeTETTettigoniidaeTIPTipulidaeTORTortricidaeTRITrichogrammatidaeURAUraniidaeVESVespidae	PIE	Pieridae	PLU	Plutellidae	POM	Pompilidae
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	PSY	Psychodidae	PTE	Pterophoridae	PYR	Pyralidae
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	PYRG	Pyrgomorphidae	RAP	Rhaphidophoridae	RED	Reduviidae
SCUScutelleridaeSESSesiidaeSILSilphidaeSIMSimuliidaeSIRSiricidaeSPHSphingidaeSPHESphecidaeSTAStaphylinidaeSYRSyrphidaeTABTabanidaeTENTenebrionidaeTEPTephritidaeTETTettigoniidaeTIPTipulidaeTORTortricidaeTRITrichogrammatidaeURAUraniidaeVESVespidae	RIO	Riodinidae	ROM	Romaleidae	SAR	Sarcophagidae
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SPHESphecidaeSTAStaphylinidaeSYRSyrphidaeTABTabanidaeTENTenebrionidaeTEPTephritidaeTETTettigoniidaeTIPTipulidaeTORTortricidaeTRITrichogrammatidaeURAUraniidaeVESVespidae	SCU	Scutelleridae	SES	Sesiidae	SIL	Silphidae
TAB Tabanidae TEN Tenebrionidae TEP Tephritidae TET Tettigoniidae TIP Tipulidae TOR Tortricidae TRI Trichogrammatidae URA Uraniidae VES Vespidae	SIM	Simuliidae	SIR	Siricidae	SPH	Sphingidae
TET Tettigoniidae TIP Tipulidae TOR Tortricidae TRI Trichogrammatidae URA Uraniidae VES Vespidae	SPHE	Sphecidae	STA	Staphylinidae	SYR	Syrphidae
TRI Trichogrammatidae URA Uraniidae VES Vespidae	TAB	Tabanidae	TEN	Tenebrionidae	TEP	Tephritidae
·	TET	Tettigoniidae	TIP	Tipulidae	TOR	Tortricidae
YPO Yponomeutidae ZYG Zygaenidae	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