

BIOPHILATELY

OFFICIAL JOURNAL OF THE BIOLOGY UNIT OF ATA

DECEMBER 2013

VOLUME 62, NUMBER 4



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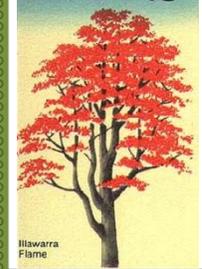


advice to



Carl J Bajema
Darwin's Voyage

More Inside >>



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

Back copies of *Biophilately* are available from the Librarian. Copies of separate articles are available at a charge six cents per page. Please contact the individual associate editors if you have queries about the content of their columns.

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

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

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

NOTE: Please provide a self-addressed envelope with the necessary return postage (or International Reply Coupons, if available) for all enquiries requiring an answer.

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PLEASE NOTE: Material for the next issue should be in the hands of the Editor before 14 February 2014.

FROM THE EDITOR'S DESK

This issue completes Volume 62 and reminds us that another year is coming to a close. With that in mind, I wish all of you a terrific holiday season and a safe and prosperous new year. As a holiday gift from the Governing Board to our members, you will be receiving an additional publication along with this edition. It contains an Index of the entire run of the journal's volumes over its 62-year existence together with a history of the Biology Unit from its beginning until now. I think you will learn many things you did not know about our study unit and the excellent contributions it has made to the study of both Philately and Biology.

The end of one year and start of a new one also serves as a reminder to send in your annual dues. We have included a renewal form with this edition for your convenience. I encourage you also to list your collecting interests on the form. This information helps us focus our publication efforts. I also wish you would consider giving permission to publish your contact information. One of the main missions of this study unit is to facilitate the exchange of knowledge and information among its members. This is difficult to do if we do not know how to get in touch with one another.

On the dues notice, you will also find an entry for donations. The Biology Unit is a 501(c)(3) non-profit organization and as such, your donations are fully tax deductible. Please consider sending an extra amount with your dues. These gifts help provide the Biology Unit awards given at the National Topical Stamp Show and other items such as the bonus publication you just received.

You will notice a few changes in organization of this edition that are in response to the feedback we have received from philatelic literature exhibitions. I have moved the Glossary to the back of the document to place the reference information together in one place. I have also added a new section dealing with Unit and other related news.

Since this is the final edition of the year, it includes an index to the present Volume on the final pages.

The Unit members have approved the proposed amendments to the Unit Constitution and By-Laws and I have included the complete updated versions of these documents starting on page 326. Members might want to extract or make copies of these documents and retain them for future reference.

We are fortunate to have two detailed articles in this edition. One is an updated re-publication of an article on Darwin's Voyage by Dr. Carl J. Bajema that begins on page 240. Dr. Bajema is a 60-year member of the Unit and former Professor of Biology at Grand Valley State College. The second article starting on page 253, is the first of a two-part feature by Chris Dahle on Herbs and Spices. Our cover contains a riddle related to this subject. See if you can figure it out. The answer is on page 263.

Our membership drive has succeeded in gaining 12 new members this quarter. See the Secretary-Treasurer's Corner for a listing. The Governing Board would like all of you to help keep this effort going by asking you to promote the Unit among your friends at your local clubs and shows. You can find more information and membership application forms at our web site: www.biophilately.org.

Jack Congrove

DUES RATES (US\$)

Regular membership (US & Canada)	\$20
Overseas membership	\$25
Overseas airmail (add)	\$10
On-line membership	\$15

ADVERTISING RATES

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

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

PRESIDENT'S MESSAGE

In my last message, I mentioned that my Wife and I were about to leave for the APS StampShow in Milwaukee. Well, that got “nipped in the bud,” as she had to go into hospital! Fortunately, my Daughter was able to come and take care of things for a few days, so off to the show I went.

There was a good reason for attending, as I had arranged to take all my Southern Rhodesia postal stationery to a dealer friend who would be at the show. I also took quite a lot of miscellaneous thematic covers and managed to dispose of almost everything at very reasonable prices. In addition to the philatelic goings-on, I had a chance to meet with Jack Congrove and Larry Davidson and discuss the current state of *Biophilately* and what else can be done to improve the publication. I think we got some good work done. The show location was at the Hyatt right downtown and I found that this was one of the U.S. cities that seems to “shut up shop” over the weekend—much different from Toronto or Montreal, both of which have many things going on and hosts of visitors all the time.

While at ROPEX earlier in the year, I had made arrangements with a dealer in natural history subjects to come up to Canada and look at my butterfly and moth collection. He had already purchased the “other insects” in Rochester. So, on returning from Milwaukee, I got started on organizing the collection and updating the catalogue, which took quite some time. In due course, he arrived and we sat down to look at the material. He was favorably impressed and we agreed on a price quite quickly, but I was quite sorry to see all my lovely material fly away, as it were. Still, I had great fun putting the collection together over the years and separating material to include in my “Microcosmos” exhibit, which had received a couple of gold awards in exhibition.

One thing I did before retiring the exhibit was to make a color photocopy of the whole thing, so at least I can look through it from time to time and remember all the fun and hard work over the years. Exhibiting really is challenging, but as long as one does not do it “just for the medals,” a great deal of pleasure may be had. I would urge any of our members who have not done so to “give it a go!” Love those Australian expressions!

Until next time...

Alan J. Hawks

Flora
&
Fauna



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SECRETARY-TREASURER'S CORNER

CONSTITUTION AND BY-LAWS AMENDMENTS

Unit members returned 22 ballots for the voting on amending the Biology Unit Constitution and By-laws. All ballots approved the changes that were proposed. Therefore, in accordance with Article 7, the proposed amendments are accepted and the Constitution and By-Laws shall incorporate the amended wording. See pages 326–28 for copies of the complete revised documents.

FINANCIAL REPORT

Income 2013		
	Dues by check, credit card	\$1350.62
	Dues by PayPal	\$92.16
	Donations	\$260.00
Total Income		\$1702.78
Expenses 2013		
	Printing	\$685.19
	Postage	\$1303.23
	Supplies	\$75.64
	Sales tax	\$55.14
	Advertising	\$35.00
	Credit card fees to ATA	\$10.00
	NTSS award	\$18.99
	Web site	\$101.49
	Domain name (3 years)	\$41.85
Total Expenses		\$2194.68
Assets		
	Checkbook balance, January	\$18,103.56
	Checkbook balance, November	\$17,584.65
	PayPal credit	\$318.52
Total Assets		\$17,903.17

NEW MEMBERS

The Biology Unit welcomes the following new members:

1838	Roger van Laere, Antwerp, Belgium	birds (5)
1839	Stephen McNair, Southlake, TX	marine life (9)
1840	James Miguelgorry, San Jose, CA	birds (5)
1841	Randy Lloyd, North Platte, NE	insects (7), malaria
1842	Van Siegling, Gahanna, OH	prehistoric (0)
1843	Susan Jones, Pingree Grove, IL	birds (5), marine life (9), coelacanths
1844	Gina Russ, Fort Mitchell, KY	zoology (3), amphibians & reptiles (4), birds (5)
1845	Susan Setterberg, Ridgefield, WA	birds (5)
1846	Harold Boehning, Dallas, TX	flora & fauna (1)
1847	Paula Corman, Wichita, KS	botany (2), birds (5), mammals (8)
1848	Lynn R. Batdorf, Bethesda, MD	botany (2)
1849	Fred Schoen, Seattle, WA	birds (5)

LETTERS

[*Ed. Note: We will continue this feature as long as we receive publishable correspondence. This means you have to send us some.*]

A thank you letter from the American Philatelic Research Library dated 20 August 2013.

“Thank you for your donation of the following to the APRL from the APS StampShow 2013 literature exhibition: *Biophilately*, Volume 61, numbers 2, 3, and 4 and Volume 62, number 1 (2 copies).

“Acknowledgement of your donation will appear in *The Philatelic Literature Review*....

“We appreciate your generosity and continued support of the APRL. If we can be of assistance to you, please feel free to contact us.” —Tara E. Murray, Director of Information Services/Librarian

Our journal received a Silver award in this literature exhibition. —Ed.

A suggestion from a member.

“I think the expiration date (of when our membership is up and dues are due) should be part of the address label as a constant reminder of when we should send our checks to stay current.” —T.L. Jordan

This note provides a great reminder that our annual dues follow the fiscal year designated in accordance with Article 2 of the Unit By-Laws to start on 1 January. This means that for members who have not paid ahead, or who joined at a pro-rated schedule in the last year, dues are payable shortly after you receive this edition. This suggestion is a simple one to implement and our Secretary will take on the task. This may also provide a bonus effect in helping to reduce the mailing of separate reminders. —Ed.

IN MEMORIAM: ALAN L. STEFFEN

by Jack R. Congrove

I am sad to report that Alan L. Steffen (LM16) has passed away. Although I never got to meet him, we shared the same interest in the topic of butterflies on stamps and we corresponded over a checklist that I published. He died on 26 March 2013 at Autumn Oaks Caring Center, in Mountain Grove, Missouri.

Alan was born 27 February 1927, and raised in the small community of Versailles, Ohio. He was preceded in death by his parents, Henry and Maude Steffen, and by his only sister, Carol Steffen. Also preceding him in death was his first wife, Ginny.

Alan attended Ohio State University and then served as an enlisted man in the U.S. Army in 1945-46. Following his discharge, he received an M.S. degree in Entomology from Ohio State University in 1949. He was an entomologist and a retired U.S. Foreign Service Officer, serving 29 years, mostly abroad. He joined the Biology Unit in 1955, and was a frequent contributor to *Biophilately* on a wide variety of topics.

He is survived by his wife, Doris, of 23 years, two stepchildren, three step-grandchildren, and eight step-great grandchildren.

NEWS OF NOTE

BIRDPEX 2014



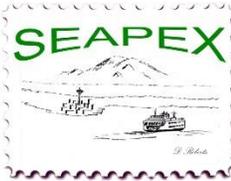
BIRDPEX is an international philatelic exhibition of “birds” that takes place every four years. The seventh edition will take place in Poitiers (France) 1–4 May 2014.

Every “bird” exhibitor can participate—no qualification needed—in the following classes: Thematic philately, Maximaphily, Open class, Postal History, Traditional philately, One Frame, and Youth.

See details and entry forms at <http://www.mg-o.de/images/birdpex2014/birdpex-7-uk.pdf>.

The suspense date for entry is 15 December 2013. There is no entry fee for Youth exhibits. The fee for multi-frame exhibits is €10.00 per frame and €15.00 for One Frame exhibits.

SEAPEX 2013

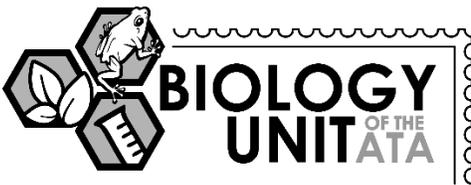


The Seattle Philatelic Exhibition held its annual show 1–3 November 2013, at the Tukwila Community Center in the Seattle suburb of Tukwila, Washington. The show included 15 dealers and 125 competitive exhibit frames. In addition, there were several presentations, including one on Topical Collecting by Keith Edholm, as well as philatelic society meetings, free stamp evaluations, and a Boy Scout merit badge class.

Among the exhibits, four dealt with biological subjects. First-time exhibitor and Unit member Bea Vogel received a Bronze award and the AAPE Novice Award for her one-frame exhibit titled, *Arachnids: Spiders and Their Kin*. Anne Harris won a Vermeil award for her display exhibit, *The Horse in America During its Golden Age*. Elizabeth Hisey, noted for her culinary themed exhibits, received a Vermeil award and the One-Frame Grand Award for her exhibit titled, *Roast Quail—From Field to Plate*. Chris Dahle won a Silver award for his thematic exhibit, *Exploring the Evolution of Plants: From Phytoplankton to Orchids*.

Next year’s show is planned for 12–14 September 2014, at the same location. The exhibition will be in the fourth and final year of its probationary period to qualify as a World Series of Philately show.

NEW UNIT LOGO



Our Unit has a new logo, which we have been using for the past several months. We received some very complimentary comments regarding it from Editor Wayne Youngblood, in the latest edition of *Topical Time*.

“I’m particularly taken by the crisp, clean appearance of the new one, which also manages to very effectively—yet subtly—communicate the philatelic and overall purpose of the study unit at a glance.”

The pattern symbolizes the three main branches of biology: Botany, Zoology, and Microbiology. Our logo was designed by Theresa A. Cummins, a talented graphical designer from Tacoma, Washington. She is a graduate of Western Illinois University with a degree in Fine Arts and has worked as an illustrator and graphic artist for prominent businesses in the Pacific Northwest including Wizards of the Coast and the U.S. Army. She also designed the cover template for this volume of the journal. You will see more of her designs in upcoming editions and can view some of her other work at her web site: <http://www.creativecummins.com>.

**A PHILATELIC VOYAGE WITH CHARLES DARWIN
ON BOARD THE HMS BEAGLE, 1831–1836**

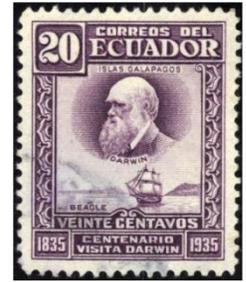
Dr. Carl J. Bajema, LM22

Jack R. Congrove, BU1424

[*Ed. Note: This article is a reprint, with permission of the author, of the original published in Bio-Philately, Volume 19, Number 3. Because the journal was unable to reproduce and print stamp images at that time, the original article was text-only and merely made reference to each stamp. I have updated it to include the actual stamp images. In some cases I have substituted more a recent issue for the original cited item.*]

On December 27, 1831, the *HMS Beagle* sailed from England on a nautical surveying voyage with an unknown naturalist by the name of Charles Darwin on board. This voyage was to rank with the travels of St. Paul and the voyages of Columbus and Magellan in terms of the impact it has had on how man perceives his universe.

The *Beagle* dropped anchor first in the Cape Verde Islands in the Atlantic Ocean off the coast of Africa where Darwin was able to observe the geological nature of volcanic islands. Darwin's observations of the flora and fauna of these islands were to serve as a very important basis for comparison when he visited the Galápagos Islands later in the voyage.



HMS Beagle
Ecuador Sc#343
A133, 1936



Cape Verde Location
Cape Verde Sc#277
A11, 1952



São Vicente Is.
Cape Verde Sc#257
A9, 1948



São Vicente Beach
Cape Verde Sc#262
A10, 1948



Fogo Island Volcano
Cape Verde Sc#264
A10, 1948

Darwin became ecstatic when the ship reached Brazil and described the flora and fauna as follows:

“I can only add raptures to the former raptures. I collected a great number of brilliantly colored flowers, enough to make a florist go wild. Brazilian scenery is nothing more nor less than a view in the Arabian Nights, with the advantage of reality.”



Royal Palms
Brazil Sc#449
A144, 1937



Forest
Brazil Sc#841
A371, 1956



Harpy Eagle
Brazil Sc#1084
A577, 1968



Red-crested Cardinal
Brazil Sc#1087
A580, 1968



Uirapuru
Brazil Sc#1088
A580, 1968



Iguazu Falls
Argentina Sc#639
A240, 1955

It was the great diversity of living plant and animal species that impressed Darwin during his stay in Brazil. When the *Beagle* sailed down the coast to Argentina, Darwin's interest shifted from the study of living species to the study of extinct species.

Darwin found the Argentine pampas to be a source of huge fossil bones of enormous prehistoric animals.*

[*It is not implied that these specific fossils are found in Argentina.]



Tierra del Fuego
Argentina Sc#695
A277, 1959



Megalocnus
Cuba Sc#C183
AP84, 1958

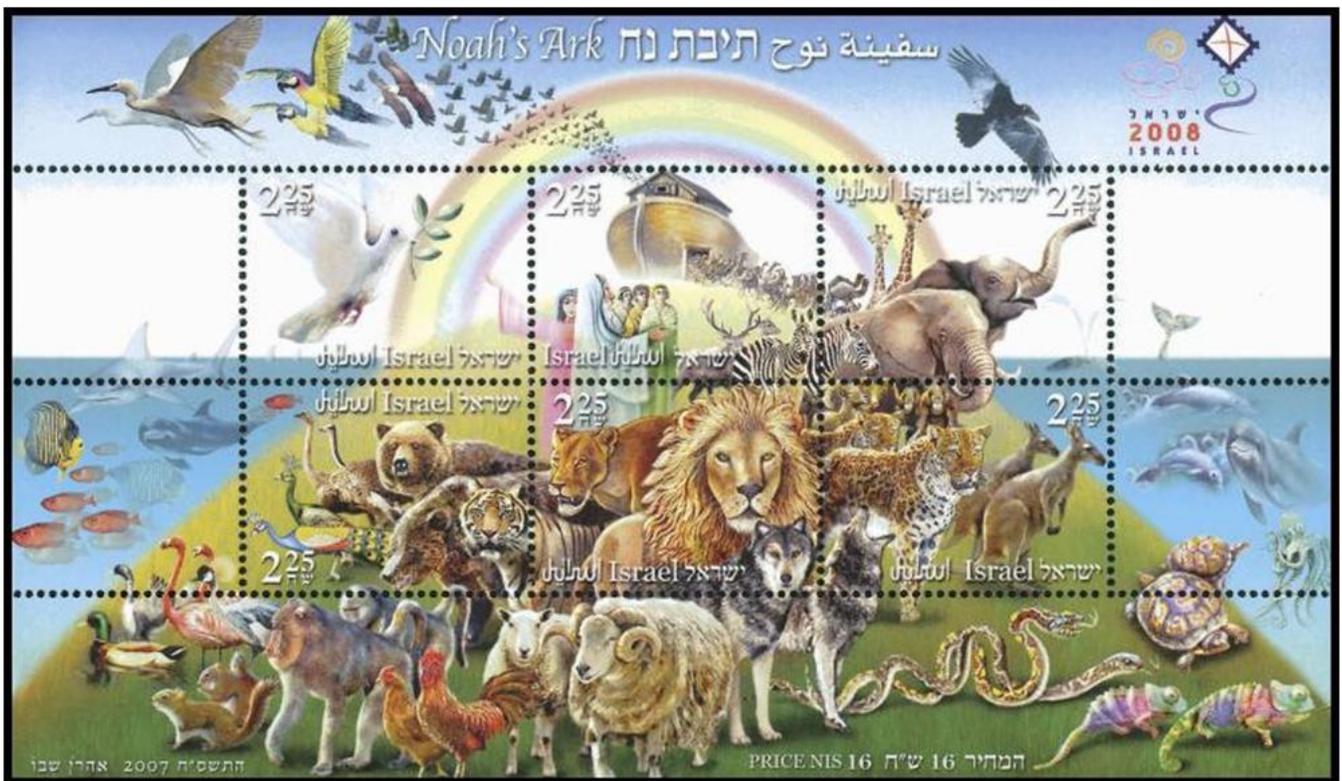


Iguanodon
Belgium Sc#664
A206, 1966



Deinotherium
Romania Sc#1892
A593, 1966

He began to wonder if, in the past, more animals had existed than Noah's Ark could have accommodated.



Noah's Ark Animals
Israel Sc#1712
A779, 2007

In the Falkland Islands and Argentina Darwin observed three species of birds that were flightless:

“Thus we find in South America three birds which use their wings for other purposes besides flight; the penguins as fins, the steamer (duck) as paddles, and the ostrich (rhea) as sails...”



Gentoo Penguin
Falkland Islands Sc#93
A22, 1938



Steamer Ducks
Falkland Islands Sc#133
A37, 1960



Greater Rhea
Argentina Sc#CB18
SP14, 1960



Magellan Strait
Chile Sc#237
A104, 1944

The *Beagle* sailed from Argentina to Chile via the Straits of Magellan. It was in Chile that Darwin came to appreciate the role of earthquakes and volcanic action as powerful geologic forces. He described the eruption of Mt. Osorno as follows:

“On the night of the 19th the volcano Osorno was in action. At midnight the sentry observed something like a large star, which gradually increased in size til about three o’clock, when it presented a very magnificent spectacle. By the aid of a glass, dark objects, in constant succession, were seen, in the midst of a great glare of red light, to be thrown up and to fall down. The light was sufficient to cast on the water a long bright reflection.”



Mount Osorno
Chile Sc#206
A84, 1938

Hardly a month had passed when a severe earthquake shook the ground under Darwin’s feet. Darwin recorded in his diary:

“The most remarkable effect of this earthquake was the permanent elevation of the land...Captain Fitz Roy found beds of putrid mussel shells still adhering to the rocks ten feet above high-water mark; the inhabitants had formerly dived at low-water spring-tides for these shells.”

They had observed that earthquakes could push the earth’s crust toward the skies ultimately forming mountains! Soon afterwards when climbing the Andes the *Beagle’s* Naturalist found fossil sea shells as high as 14,000 feet.



Nautilus Fossil
Algeria Sc#247
A39, 1952



Ammonite
Cuba Sc#C184
AP84, 1958



Intl. Geological Congress
Czechoslovakia Sc#1562 & Sc#1559
A587, 1968

This led him to record in his diary:

“I now beheld the bed of the ocean forming a chain of mountains more than seven thousand feet in height.”



Ammonite
Switzerland Sc#B274
SP208, 1958



Gryphaea Fossil
Switzerland Sc#B294
SP208, 1960



Ammonite
Netherlands Sc#B364
SP172, 1962



Mount Fitz Roy
Argentina Sc#641
A240, 1955



Andes Mountains
Chile Sc#329
A159, 1962

Darwin became convinced that “nothing, not even the wind that blows, is so unstable as the level of the crust of this earth.”

Darwin was now thinking in terms of change rather than constancy in the geological realm. He was to extend this way of thinking to the biological realm as the *Beagle* dropped anchor in the Galápagos Islands off the coast of Ecuador on September 15, 1835.



Galápagos Islands Map
Ecuador Sc#340
A130, 1936



Galápagos Islands
Ecuador Sc#L2
A2, 1957

The geology and natural history of these islands played a major role in undermining Darwin’s belief in the doctrine of special creation.



Galápagos Scene
Ecuador Sc#345
A135, 1936



Land Iguana
Ecuador Sc#341
A131, 1936



Marine Iguana
Ecuador Sc#L3
A1, 1957



Tortoise
Ecuador Sc#342
A132, 1936

In the *Origin of Species*, Darwin states:

“The Galápagos Archipelago, situated under the equator, lies at the distance of between 500 and 600 miles from the shores of South America....The Naturalist looking at the inhabitants of these volcanic islands in the Pacific, distant several hundred miles from the continent feels he is standing on American land. Why should this be so? Why should the species which are supposed to have been created in the Galápagos Archipelago, and nowhere else, bear so plainly the stamp of affinity to those created in America? There is nothing in the conditions of life, in the geological nature of the islands, in their height or climate, or in the proportions in which the several classes are associated together, which closely resembles the conditions of the South American Coast; in fact, there is a considerable dissimilarity in all these respects. On the other hand, there is a considerable degree of resemblance in the volcanic nature of the soil, in the climate, height, and size of the islands, between the Galápagos and the Cape Verde Archipelagoes; but what an entire and absolute difference in their inhabitants! The inhabitants of the Cape Verde Islands are related to those of Africa, like those of Galápagos to America. Facts such as these admit to no sort of explanation on the ordinary view of independent creation.”

Tahiti was the next island visited by the *Beagle* on its epoch making voyage around the world. Darwin described his first glimpse of Tahiti as follows:



Outrigger Canoe
French Polynesia Sc#217
A35, 1966

“At daylight, Tahiti, an island which must forever remain classical to the voyager in the South Sea, was in view....As we anchored in Matavia Bay we were surrounded by canoes.”



South Pacific Map
French Polynesia Sc#198
A29, 1962

The inhabitants of Tahiti also made a lasting impression on young Darwin who wrote:

“I was pleased with nothing so much as with the inhabitants. The common people when working, keep the upper part of their bodies quite naked, and it is then that the Tahitians are seen to advantage. They are very tall, broad-shouldered, athletic, and well-proportioned. A white man bathing by the side of a Tahitian was like a plant bleached by the gardener’s art compared with a fine dark green one growing vigorously in the fields.



Tahitian Dancers
Fr. Polynesia Sc#194
A26, 1960

“Most of the men are tattooed, and the ornaments follow the curvature of the body so gracefully that they have a very elegant effect.”



Tahitian Girl
Fr. Polynesia Sc#171
A20, 1948



Bora Bora Girl
Fr. Polynesia Sc#180
A23, 1955



Polynesian Girl
Fr. Polynesia Sc#182
A24, 1958



Spear Fishing
Fr. Polynesia Sc#193
A25, 1960



Tattooed Man
Fr. Polynesia Sc#239
A39, 1968

The *Beagle* sailed on, stopping briefly at New Zealand, and dropped anchor in Sydney Harbor in Australia on January 12, 1836. While in Australia, Darwin saw the platypus, Australian aborigines, and a kangaroo rat, but he was not fortunate enough to have seen a wild kangaroo.



Platypus
Australia Sc#324
A111, 1959



Aborigine
Australia Sc#226
A59, 1950



Aborigine
Australia Sc#248
A59, 1952



Kangaroo
Australia Sc#322
A111, 1959

Sailing west from Australia, the *Beagle* reached the Cocos (Keeling) Islands on April 2, 1836. It was here that Darwin gathered the data that led him to hypothesize that atoll islands were formed by the accumulation of the remains of corals growing on the rim of volcanoes that were sinking into the ocean.

“I am glad to have visited these islands: such formations surely rank high amongst the wonderful objects of this world. Captain Fitz Roy found no bottom with a line 7,200 feet in length, at a distance of only 2,200 yards from the shore; hence this island forms a lofty submarine mountain, with sides steeper even than those of the most abrupt volcanic cone. The saucer shaped summit is nearly ten miles across....We feel surprised when travelers tell us of the vast dimensions of the pyramids and other great ruins, but how utterly insignificant are the greatest of these when compared to these mountains of stone accumulated by the agency of various minute and tender animals (corals).”

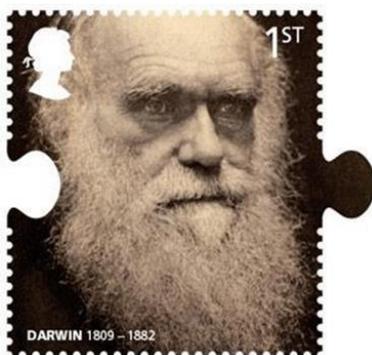


Coral
Cocos Islands Sc#12
A5, 1969



Volcanic Rim
Cocos Islands Sc#3
A3, 1963

The ship continued its homeward bound journey rounding the Cape of Good Hope of Africa and after a few stopovers dropped anchor in Falmouth, England on October 2, 1836. Thus ended one of the most important voyages of all time.



Charles Darwin
Great Britain Sc#2627
A663, 2009

While on this voyage, Darwin saw a volcano in eruption, and experienced an earthquake and studied the associated elevation of the land. He observed the diversity of plants and animals (both living and fossil) and the restricted geographical range of many species. These observations led Darwin to accept geological and biological evolution as a fact and ultimately to propose the theory of natural selection to explain how biological evolution takes place.

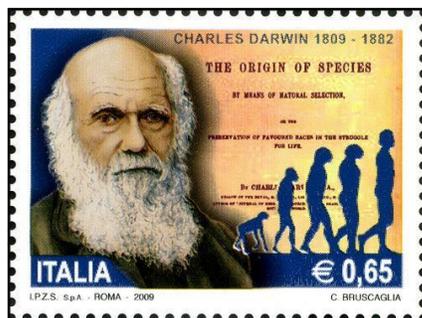


Darwin's Theory
Great Britain Sc#1868
A500, 1999

The Origin of Species in which Darwin expounded the fact of evolution and the theory of natural selection was published in 1859.



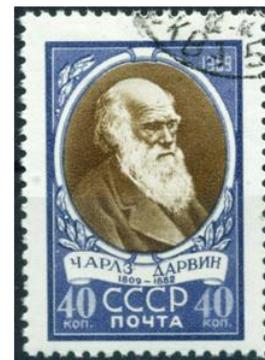
Charles Darwin
DDR Sc#388
A121, 1958



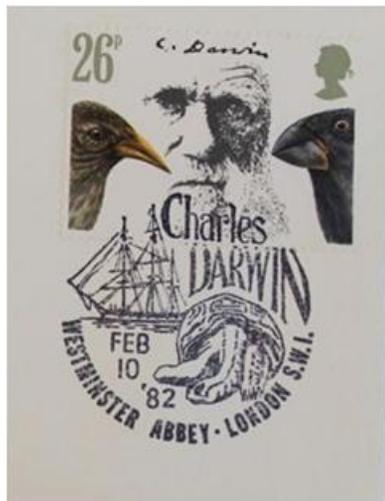
The Origin of Species
Italy Sc#2911
A1616, 2009



Darwin
Romania Sc#1266
A467, 1959



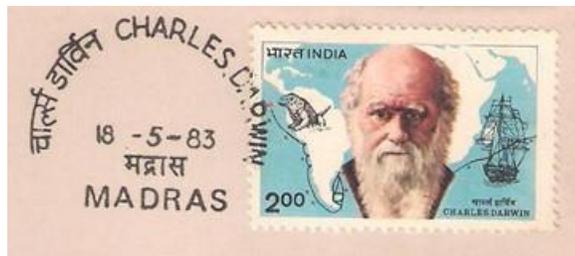
Darwin
Russia Sc#2166
A1133, 1959



Darwin wrote several other books including *The Descent of Man* and *Selection in Relation to Sex* in 1871. He died in 1882 and his remains were interred in Westminster Abbey.



Westminster Abbey
Great Britain Sc#453
A187, 1966





BOTANY

Editor

Christopher E. Dahle, BU1269



New Listings

Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
AUSTRALIA				
2013 February 5 (perf 14½×14)				
3840	60c	Eucalyptus leaves, <i>Eucalyptus</i> sp.	Myrtaceae	V A
3843	60c	Rose petal, <i>Rosa x hybrida</i>	Rosaceae	Fl A
3844	60c	Orchid (die cut 11¼)	Orchidaceae	Fl A U
3846	60c	Eucalyptus leaves, <i>Eucalyptus</i> sp.	Myrtaceae	V A
3849	60c	Rose petal, <i>Rosa x hybrida</i>	Rosaceae	Fl A
3850	60c	Orchid	Orchidaceae	Fl A U
2013 April 23 (Botanical Gardens) (perf 14½×14)				
3904	60c	Botanical Gardens: Hobart		V A U
3905	60c	Botanical Gardens: Canberra		V A U
3906	60c	Botanical Gardens: Mount Tomah NSW		V A U
3907	60c	Botanical Gardens: Darwin		V A U
3908	60c	Botanical Gardens: Cranbourne, Victoria s/a		V A U
3909	60c	Botanical Gardens: Hobart		V A U
3910	60c	Botanical Gardens: Canberra		V A U
3911	60c	Botanical Gardens: Mount Tomah NSW		V A U
3912	60c	Botanical Gardens: Darwin		V A U
3913	60c	Botanical Gardens: Cranbourne, Victoria		V A U
BURKINA FASO				
2011 November 7 (Vegetable Cultivation)				
1339	30fr	Onions, <i>Allium cepa</i>	Amaryllidaceae	V A
1340	70fr	Cabbages, <i>Brassica oleracea</i>	Brassicaceae	V A
1341	100fr	Carrots, <i>Daucus carota</i>	Apiaceae	V A
CAPE VERDE ISLANDS				
2011 (Flora & Fauna of Cha das Caldeiras Protected Area)				
960	10e	<i>Verbascum cystolithicum</i>	Plantaginaceae	Fl A
961	40e	<i>Echium vulcanorum</i>	Boraginaceae	Fl A
963	100e	<i>Erysimum caboverdeanum</i>	Brassicaceae	Fl A
2012 (Flora & Fauna of Santo Antão Protected Area)				
986	30e	<i>Sideroxylon marginatum</i>	Sapotaceae	T A
987	40e	<i>Carex antoniensis</i>	Cyperaceae	V A
989	60e	<i>Papaver gorgoneum</i>	Papaveraceae	Fl A
CHINA P. R.				
2013 February 28				
4065	\$1.20	Heart & flowers, <i>Lilium</i> sp. & <i>Rosa</i> sp.	Liliaceae; Rosaceae	Fl B

CHINA P. R. (continued)		2013 March 16 (Peach Blossoms in various decorative frames)		
4073	80f	<i>Prunus persica</i>	Rosaceae	Fl A
4074	80f	<i>Prunus persica</i>	Rosaceae	Fl A
4075	\$1.20	<i>Prunus persica</i>	Rosaceae	Fl A
4076	\$1.20	<i>Prunus persica</i>	Rosaceae	Fl A
4077	\$1.20	<i>Prunus persica</i>	Rosaceae	Fl A
4078	\$1.20	<i>Prunus persica</i>	Rosaceae	Fl A
4079	\$1.20	<i>Prunus persica</i>	Rosaceae	Fl A
4080	\$1.20	<i>Prunus persica</i>	Rosaceae	Fl A
4081	\$1.20	<i>Prunus persica</i>	Rosaceae	Fl A
4082	\$1.20	<i>Prunus persica</i>	Rosaceae	Fl A
4083	\$1.50	<i>Prunus persica</i>	Rosaceae	Fl A
CHRISTMAS ISLAND		2013 January 13 (Chinese Zodiac and complimentary foods)		
511a	15c	Apples, <i>Malus domestica</i> (with rat)	Rosaceae	Fr B
511b	15c	Cherries, <i>Prunus avium</i> (with ox)	Rosaceae	Fr B
511c	15c	Tomatoes, <i>Lycopersicon esculentum</i> (with dragon)	Solanaceae	Fr B
511f	20c	Oranges, <i>Citrus sinensis</i> (with rabbit)	Rutaceae	Fr B
511g	20c	Bananas, <i>Musa x paradisiaca</i> (with horse)	Musaceae	Fr B
511h	20c	Spinach, <i>Spinacea oleracea</i> (with boar)	Chenopodiaceae	V B
511i	25c	Onions, <i>Allium cepa</i> (with goat)	Amaryllidaceae	V B
511j	25c	Grapes, <i>Vitis vinifera</i> (with monkey)	Vitaceae	Fr B
511k	25c	Pumpkins, <i>Cucurbita pepo</i> (with rooster)	Cucurbitaceae	Fr B
512a	20c	Bananas, <i>Musa x paradisiaca</i> (with horse)	Musaceae	Fr B
512b	20c	Spinach, <i>Spinacea oleracea</i> (with boar)	Chenopodiaceae	V B
512c	25c	Onions, <i>Allium cepa</i> (with goat)	Amaryllidaceae	V B
512d	25c	Grapes, <i>Vitis vinifera</i> (with monkey)	Vitaceae	Fr B
512e	25c	Pumpkins, <i>Cucurbita pepo</i> (with rooster)	Cucurbitaceae	Fr B
		2013 June 18 (Flowering Shrubs)		
516a	60c	<i>Colubrina pedunculata</i>	Rhamnaceae	Fl A
516b	60c	Lantern Flower, <i>Abutilon listeri</i>	Malvaceae	Fl A
517a	\$1.20	<i>Urena sinuata</i> (= <i>U. lobata</i> var. <i>sinuata</i>)	Malvaceae	Fl A
517b	\$1.20	Hairy Indigo, <i>Indigofera hirsuta</i>	Fabaceae	Fl A
COCOS ISLANDS		2013 June 4 (Postage stamp 50th Anniversary)		
370	\$1.20	Coconut, <i>Cocos nucifera</i>	Arecaceae	Fr A
FIJI		2012 April 26 (Endangered Flora)		
1278	20c	Fijian Acropyle, <i>Acropyle sahniana</i>	Podocarpaceae	Fl A
1279	65c	Lau Fan Palm, <i>Pritchardia thurstonii</i>	Arecaceae	T A
1280	\$1.20	Cycad, <i>Cycas seemannii</i>	Cycadaceae	T A
1281	\$2	Fiji Magnolia, <i>Degeneria vitiensis</i>	Degeneriaceae	Fl A
FINLAND		2013 March 8 (Roses)		
1425	(80c)	Rose, <i>Rosa x hybrida</i>	Rosaceae	Fl A
		2013 March 8 (Berries)		
1426a	(80c)	Blackberries, <i>Rubus fruticosus</i>	Rosaceae	Fr A
1426b	(80c)	Gooseberry, <i>Ribes uva-crispa</i>	Grossulariaceae	Fr A
1426c	(80c)	Red Currants, <i>Ribes rubrum</i>	Grossulariaceae	Fr A
		2013 May 6		
1428	(80c)	Flower bouquet		Fl A U

FINLAND (Åland Islands)		2013 June 4 (Waterlilies)			
343	(€1)	White Waterlily, <i>Nymphaea alba</i>		Nymphaeaceae	Fl A
344	€2.50	Yellow Waterlily, <i>Nuphar lutea</i>		Nymphaeaceae	Fl A
FRENCH POLYNESIA		2013 April 26 (Flora & Fauna)			
1096	20fr	Lemon, <i>Citrus limon</i>		Rutaceae	Fl Fr A
		2013 May 10 (Fruit)			
1100a	100fr	Pineapples, <i>Ananas comosus</i>		Bromeliaceae	Fr A
1100b	100fr	Mangos, <i>Mangifera indica</i>		Anacardiaceae	Fr A
1100c	100fr	Bananas, <i>Musa x paradisiaca</i>		Musaceae	Fr A
1100d	100fr	Coconuts, <i>Cocos nucifera</i>		Arecaceae	Fr A
1100e	100fr	Papayas, <i>Carica papaya</i>		Caricaceae	Fr A
1100f	100fr	Watermelon, <i>Citrullus lanatus</i>		Cucurbitaceae	Fr A
GERMANY		2012 (Flower Definitives)			
2420D	58c	Pasque flower, kuhschelle, <i>Anemone patens</i> (= <i>Pulsatilla patens</i>)		Ranunculaceae	Fl A
		2013 June 6 (German Rose Show, Forst Centennial)			
2735	45c	Rose, <i>Rosa</i> sp.		Rosaceae	Fl B
		2013 February 7 (Trees)			
B1071	58c+27c	Linden, <i>Tilia x europaea</i>		Malvaceae	T A
B1072	90c+40c	Wild Cherry, <i>Prunus avium</i>		Rosaceae	T A
B1073	145c+55c	Horse Chestnut, <i>Aesculus hippocastanum</i>		Sapindaceae	T A
GREAT BRITAIN (England)		2013 March 27 (Oak Type of 2003) (see <i>Plants on Stamps</i> Vol.5, p.67)			
28	88p	English Oak, <i>Quercus robur</i>		Fagaceae	T A
GREAT BRITAIN (Scotland)		2013 March 27 (Thistle Type of 2003) (see <i>Plants on Stamps</i> Vol.5, p.68)			
42	88p	Thistle, <i>Onopordum acanthium</i>		Asteraceae	Fl A
GREAT BRITAIN (Wales & Monmouthshire)		2013 March 27 (Daffodil Type of 2003) (see Vol.5, p.68)			
42	88p	Daffodil, <i>Narcissus pseudonarcissus</i>		Amaryllidaceae	Fl A
ISRAEL		2013 February 5 (Gerbera Daisy)			
1966a	20a	Pink Gerbera, <i>Gerbera x hybrida</i>		Asteraceae	Fl A
1966b	30a	Orange & Yellow Gerbera, <i>Gerbera x hybrida</i>		Asteraceae	Fl A
1966c	40a	White Gerbera, <i>Gerbera x hybrida</i>		Asteraceae	Fl A
1966d	50a	Yellow Gerbera, <i>Gerbera x hybrida</i>		Asteraceae	Fl A
1966e	1s	Red & White Gerbera, <i>Gerbera x hybrida</i>		Asteraceae	Fl A
JAPAN		2013 April 16 (Travel Scenes)			
3531d	80¥	Tateyama Gentian, <i>Gentiana thunbergii</i> var. <i>minor</i>		Gentianaceae	Fl A MS
3531g	80¥	Yellow Day Lilies		Xanthorrhoeaceae	Fl A MS
3531i	80¥	Aleutian Avens, <i>Geum pentapetalum</i>		Rosaceae	Fl A MS
		2013 April 24 (Seasonal Flowers)			
3533	50¥	Lily, <i>Lilium japonicum</i>		Liliaceae	Fl A
3534	50¥	Daylily, <i>Hemerocallis</i> sp.		Xanthorrhoeaceae	Fl A
3535	50¥	Lilac, <i>Syringa vulgaris</i>		Oleaceae	Fl A
3536	50¥	Clematis, <i>Clematis</i> sp.		Ranunculaceae	Fl A
3537	50¥	Skunk Cabbage, <i>Lysichiton camtschatcensis</i>		Araceae	Fl A

JAPAN (continued)		2013 April 24 (Seasonal Flowers)	
3538	80¥ Lily, <i>Lilium japonicum</i>	Liliaceae	Fl A
3539	80¥ Daylily, <i>Hemerocallis</i> sp.	Xanthorrhoeaceae	Fl A
3540	80¥ Lilac, <i>Syringa vulgaris</i>	Oleaceae	Fl A
3541	80¥ Clematis, <i>Clematis</i> sp.	Ranunculaceae	Fl A
3542	80¥ Skunk Cabbage, <i>Lysichiton camtschatcensis</i>	Araceae	Fl A
2013 May 15 (Miyagi Local Autonomy Law 60th anniv.)			
3543b	80¥ Cherry tree, <i>Prunus mume</i>	Rosaceae	Fl T B MS
2013 May 23 (Coexist with Nature Series 3)			
3546	80¥ <i>Primula kisoana</i> var. <i>kisoana</i>	Primulaceae	Fl A
2013 May 24 (Tottori Prefecture Afforestation)			
3549a	50¥ <i>Quercus serrata</i>	Fagaceae	T A MS
3549b	50¥ Japanese Lily, <i>Lilium japonicum</i>	Liliaceae	Fl A MS
3549c	50¥ Japanese Cherry, <i>Cerasus</i> (= <i>Prunus</i>) <i>jamasakura</i>	Rosaceae	Fl A MS
3549d	50¥ Japanese Yew, <i>Taxus cuspidata</i>	Taxaceae	Fr A MS
3549e	50¥ Japanese Chinquapin, <i>Castanopsis sieboldii</i>	Fagaceae	Fr A MS
3549f	50¥ Blood Iris, <i>Iris sanguinea</i>	Iridaceae	Fl A MS
3549g	50¥ Nashi Nijisseiki Pear, Asian pear, <i>Pyrus pyrifolia</i>	Rosaceae	Fl A MS
3549h	50¥ Japanese Persimmons, <i>Diospyros kaki</i>	Ebenaceae	Fr A MS
3549i	50¥ Japanese Chestnut, <i>Castanea crenata</i>	Fagaceae	Fr A MS
3549j	50¥ Japanese Bigleaf Magnolia, <i>Magnolia obovata</i>	Magnoliaceae	Fl A MS
2013 May 31 (2nd Hideo Noguchi Africa Prize)			
3550	80¥ <i>Rhododendron fauriei</i> (= <i>brachycarpum</i>)	Ericaceae	Fl B
2013 June 14 (Hiroshima Local Government Law, 60th anniv.)			
3553a	80¥ Maple leaves, <i>Acer palmatum</i>	Sapindaceae	V B MS
3553d	80¥ Lemons, <i>Citrus limon</i>	Rutaceae	Fr A MS
2013 June 25			
3558b	80¥ Suigo Sawara Aquatic Botanical Garden		Fl B MS
2013 July 12 (Gunma Local Autonomy Law 60th anniv.)			
3564b	80¥ Rhododendrons, <i>Rhododendron molle</i> ssp. <i>japonicum</i>	Ericaceae	Fl A MS
3564e	80¥ Daylilies, Nozorikisuge, <i>Hemerocallis</i> sp.	Xanthorrhoeaceae	Fl A MS
2013 July 23 (Letter Writing Day)			
3568	50¥ Morning Glories, <i>Ipomoea nil</i>	Convolvulaceae	Fl A
3569	50¥ Tomatoes, <i>Lycopersicon esculentum</i>	Solanaceae	Fr A
	Cucumbers, <i>Cucumis sativus</i>	Cucurbitaceae	Fr A
	Eggplants, <i>Solanum melongena</i>	Solanaceae	Fr A
3570e	80¥ Corn, <i>Zea mays</i>	Poaceae	Fr A
3570f	80¥ Morning Glories, <i>Ipomoea nil</i>	Convolvulaceae	Fl A
3570j	80¥ Tomatoes, <i>Lycopersicon esculentum</i>	Solanaceae	Fr A
ITALY		2013 April 5 (Botanical Gardens)	
3175	70c Castel Trauttmansdorff, Merano		V A U
3176	70c Cinque Terre National Park		V A U
3177	70c Museum, Bari		V A U
LATVIA		2013 March 8 (Iris)	
829	35s Iris, <i>Iris</i> sp.	Iridaceae	Fl A

LEICHTENSTEIN**2013 June 3** (Flower Type of 2012) (see *Plants on Stamps* Vol.5, p.118)

1573	100rp	<i>Gentiana rhaetica</i>	Gentianaceae	Fl A
1574	190rp	Alpine Forget-me-not, <i>Myosotis alpestris</i>	Boraginaceae	Fl A
1575	400rp	Hairy Alpenrose, <i>Rhododendron hirsutum</i>	Ericaceae	Fl A

KYRGYGSTAN**2013 March 9** (Walnuts)

429a	17s	Walnuts, <i>Juglans regia</i> (on tree)	Fagaceae	Fr A MS
429b	20s	Walnuts, <i>Juglans regia</i> (in husks)	Fagaceae	Fr A MS
429c	23s	Walnuts, <i>Juglans regia</i> (with jar of product)	Fagaceae	Fr A MS
429d	29s	Walnuts, <i>Juglans regia</i> (in shell, kernels)	Fagaceae	Fr A MS
429e	35s	Walnuts, <i>Juglans regia</i> (in basket)	Fagaceae	Fr A MS
429f	40s	Walnuts, <i>Juglans regia</i> (grove & mountains)	Fagaceae	Fr A MS

LIBERIA**2013 January 8** (Flowers of Africa)

2840a	\$70	Egyptian White Water Lily, <i>Nymphaea lotus</i>	Nymphaeaceae	Fl A MS
2840b	\$70	Opium Poppy, <i>Papaver somniferum</i>	Papaveraceae	Fl A MS
2840c	\$70	Common Sugarbush, <i>Protea repens</i>	Proteaceae	Fl A MS
2840d	\$70	Orange Nodding-Head, Mountain Dahlia, <i>Liparia splendens</i>	Fabaceae	Fl A MS
2840e	\$70	<i>Tulipa florenskyi</i>	Liliaceae	Fl A MS
2840f	\$70	Hermanus Cliff Gladiolus, <i>Gladiolus carmineus</i>	Iridaceae	Fl A MS
2841	\$280	Calla lily, <i>Zantedeschia aethiopica</i>	Araceae	Fl A SS

NEW ZEALAND**2013 August 7** (Travel Posters)

2474c	70c	Tree fern		V A
2474d	70c	Rata blossom, Franz Joseph Glacier, <i>Metrosideros umbellata</i>	Myrtaceae	Fl A

ST. THOMAS & PRINCE ISLANDS 2010 December 1 (Our Flora)

2344a	15000d	Torch Ginger, <i>Etilingera elatior</i>	Zingiberaceae	Fl A MS
2344b	15000d	Rose, <i>Rosa x hybrida</i>	Rosaceae	Fl A MS
2344c	15000d	Heliconia, <i>Heliconia</i> sp.		Fl A MS
2344d	15000d	U/I flower		Fl A U MS
2344e	15000d	Torch Ginger, <i>Etilingera elatior</i>	Zingiberaceae	Fl A MS
2344f	15000d	U/I flower	Asteraceae	Fl A U MS
2364	SS 100000d	Same as (Sc#2344f)	Asteraceae	Fl A U SS

2010 December 1 (Cuisine of São Tomé & Príncipe)

2345a	10000d	Plantains, <i>Musa x paradisiaca</i>	Musaceae	Fr A MS
2345b	15000d	Okra, <i>Abelmoschus esculentus</i>	Malvaceae	Fr A MS
2345c	15000d	Breadfruit, <i>Artocarpus altilis</i>	Moraceae	Fr A MS
2345d	25000d	Eggplant, <i>Solanum melongena</i>	Solanaceae	Fr A MS
2345f	25000d	Bananas, <i>Musa x paradisiaca</i>	Musaceae	Fr A MS
2358	SS 100000d	Bananas, <i>Musa x paradisiaca</i>	Musaceae	Fr A SS
2359	SS 100000d	Okra, <i>Abelmoschus esculentus</i>	Malvaceae	Fr A SS

2010 December 1 (Cycle of Cacao, Coffee, and Sugar)

2349a	10000d	Cacao pods, <i>Theobroma cacao</i>	Malvaceae	Fr A MS
2349b	15000d	Cacao pods on tree, <i>Theobroma cacao</i>	Malvaceae	Fr A MS
2349c	15000d	Sugar Cane, <i>Saccharum officinale</i>	Poaceae	V A MS
2349d	20000d	Coffee berries, <i>Coffea arabica</i>	Rubiaceae	Fr A MS
2349e	20000d	Ripening Cacao pods, <i>Theobroma cacao</i>	Malvaceae	Fr A MS
2349f	25000d	Sugar Cane, <i>Saccharum officinale</i>	Poaceae	V A MS
2356	SS 100000d	Baron and cacao pods, <i>Theobroma cacao</i>	Malvaceae	Fr B SS Z
2357	SS 100000d	Baron and cacao pods, <i>Theobroma cacao</i>	Malvaceae	Fr B SS Z

ST. THOMAS & PRINCE (cont) 2010 December 1 (Handicrafts)

2365	SS 100000d	Bowl of nuts, coconut shells, <i>Cocos nucifera</i>	Areaceae	Fr A U SS Z
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SERBIA**2013 June 14 (Orchids)**

632a	22d	<i>Cymbidium burgundian</i> (<i>Cymbidium</i> Remus X <i>Cymbidium</i> Babylon)	Orchidaceae	Fl A
632b	33d	<i>Masdevallia kimballiana</i>	Orchidaceae	Fl A
632c	46d	<i>Angraecum leonis</i>	Orchidaceae	Fl A
632d	66d	<i>Cymbidium</i> 'Fort George'	Orchidaceae	Fl A

SURINAM**2013 June 19 (Thailand 2013 World Stamp Exhibition)**

1453e	\$9	<i>Dendrobium</i> sp.	Orchidaceae	Fl A MS
1453f	\$11	<i>Ixora</i> sp.	Rubiaceae	Fl A MS

TUVALU**2013 April 29 (Blossoming Plants of the Pacific)**

1240a	\$1.20	<i>Medinilla magnifica</i>	Melastomaceae	Fl A MS
1240b	\$1.20	<i>Alpinia purpurata</i>	Zingiberaceae	Fl A MS
1240c	\$1.20	<i>Nymphaea rubra</i>	Nymphaeaceae	Fl A MS
1240d	\$1.20	<i>Crotalaria retusa</i>	Fabaceae	Fl A MS
1241a	\$1.20	<i>Hibiscus rosa-sinensis</i>	Malvaceae	Fl A MS
1241b	\$1.20	<i>Gardenia taitensis</i>	Rubiaceae	Fl A MS
1241c	\$1.20	<i>Hibiscus brackenridgei</i>	Malvaceae	Fl A MS
1241d	\$1.20	<i>Ranunculus lyallii</i>	Ranunculaceae	Fl A MS
1242	\$3.50	<i>Etlingera elatior</i>	Zingiberaceae	Fl A SS
1243	\$3.50	<i>Tecomanthe speciosa</i>	Bignoniaceae	Fl A SS

UKRAINE**2013 April 24 (Crimea Tourist Attractions)**

922c	2.50h	Wine barrels and grapes, <i>Vitis vinifera</i>	Vitaceae	Fr A MS
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URUGUAY**2013 (Rights of Rural Workers)**

2412	1p	Transplanting seedlings		V B U
2416	25p	Picking apples, <i>Malus x domestica</i>	Rosaceae	Fr B

**ANIMALS; DOGS & CATS; HORSES; INSECTS; BUGS
BUTTERFLIES; MALARIA; FLOWERS & PLANTS; ORCHIDS
MUSHROOMS; MARINE LIFE; FISH; TURTLES; REPTILES
SHELLS; WHALES & SEALS; BIRDS; MINERALS
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HERBS AND SPICES PART 1: HERBS

Christopher E. Dahle, BU1269

Herbs and spices are plants or plant parts used to flavor, or enhance the flavor of, meat and vegetable dishes. Bakers also use them to flavor breads and bakery goods, including confectionary items. They are generally a minor part of the diet, but can provide trace elements and vitamins if used in quantity. Some of them are used in traditional medicine. This two-part article does not address these therapeutic properties.

Herbs consist mostly of leaves or sometimes seeds. Herb plants are mostly Temperate in origin, while spice plants are mostly Tropical. Readers will note that the families Apiaceae and Lamiaceae have the largest representation. All these plants have volatile oils, or essential oils, produced in specialized gland cells in leaves and fruit.

Spices are derived from the rhizomes, roots, stems, flowers, fruits, seeds, and bark of plants that have essential oils. Their use in cooking improves the taste of foods. In the past, the spice trade was extremely lucrative because most of the plants were Tropical and had a restricted geographical range.

What follows is a listing of commonly used herbs and spices, divided into two parts, one for herbs, and the other for spices. The list is in alphabetical order by family. Each entry contains a short description of their use and growth characteristics. Not all have appeared on stamps. For those that have, I have chosen the stamps in the list when a single motif is dominant. Occasionally there are two different species on one stamp. Some, like those for celery and rue, are the only examples where the plant appears on a stamp. Others, like Hyssop, feature another subject (e.g., butterfly) as the main motif. This plant has not yet appeared alone on a stamp.

Atriplex hortensis **Amaranthaceae** **Orache**

Use: Fresh leaves used as vegetable or culinary herb, seldom used today, but once important.

Growth characteristics: Annual herb from southeastern Europe and western Asia grows to two meters (m).

Not illustrated

Allium cepa **Amaryllidaceae** **Onion**

Use: Bulb used fresh or dried. Can be used in a variety of soups and salads, either raw, cooked, or processed.



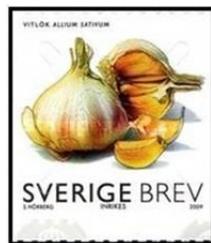
Growth characteristics: Original wild form is unknown, but is probably of Middle Eastern origin. A biennial that is harvested as an annual, it grows best in cool weather.

Albania 2843b (2007); Algeria 904a–b (1989); Bahamas 768 (1993); Brazil 1661 (1982); Bulgaria 1020 (1958); Burkina Faso (2011); Curaçao 61c (2011) [illus]; Finland 1353b (2010) [illus]; Jordan 2000b (2009); Korea North (1998); Libya 1309m (1986) & 1619o (1998); Mali 657 (1994); Montserrat 170 (1965); New Caledonia C623c (1994); Tunisia 2980 (2005); Turkey 290 (2005); Uganda 136 (1975)



Allium sativum **Amaryllidaceae** **Garlic**

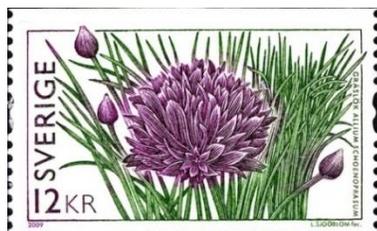
Use: Bulb is used fresh, powdered, raw, or cooked. Important in Asian, Middle Eastern, North African, southern European, and Latin American cuisines. Pungent, spicy flavor.



Growth characteristics: Perennial herb to 0.6 meter (m) that probably originated in central Asia. In use for 7000 years.

Albania 2843a (2007); Algeria 904b (1989); Bosnia & Herzegovina 554 (2006); Bulgaria 1041 (1958); Cuba 5005 (2009); Denmark 1447 (2009); Gambia 2411c (2001); Great Britain 1593 (1995); Korea North (1998); Iran 3035e (2011); Libya 1309i (1986) & 1619a (1998); Tunisia 1516 (2011) [illus]; Turkey 2979 (2005); Sweden 2624d (2009) [illus]



Allium schoenoprasum**Amaryllidaceae Chives**

Use: Fresh leaves give milder flavoring than other *Allium* species. Also used as a garnish. Found in French *fines herbes*.

Growth characteristics: Perennial herb 30–50cm. Native to Europe, Asia, and North America.

Sweden 2507c (2005); Sweden 2623 (2009) [illus]

Allium tuberosum**Amaryllidaceae Chinese chive, Garlic chive**

Use: As herb and as vegetable in Chinese, Japanese, and Korean cooking. More like garlic than chives.

Growth characteristics: Perennial from East Asia and India.

Not illustrated

Anethum graveolens**Apiaceae Dill**

Use: Fresh or dried leaves used as herbs in Germany, Poland, Scandinavia, and Russia. Most used herb for fish. Used in Indian cooking in *dal* and rice dishes. “Dill seed” used as spice in Arab countries to make *fattoush* and pickles.

Growth characteristics: Probably native to southern Europe and Southwest Asia.

Sweden 2622 (2009) [illus]

**Angelica archangelica****Apiaceae Angelica**

Use: Candied stalks flavor confectionaries. Stems, stalks, and fruits used in salads. Flavoring for gin, Chartreuse, Benedictine, *Vespétro*, and vermouth.

Growth characteristics: Biennial herb native to Europe and Asia. Grows wild in Scandinavia, cultivated other places. Grows to 2m tall.

Finland (Åland) 257 (2007) [illus]; Great Britain (Jersey) 1229 (2006); Greenland 431 (2004) [illus]; Sweden 743 & 758 (1967), 1490 (1984) [illus], 2512d (2005)

**Anthriscus cerefolium****Apiaceae Chervil**

Use: Fresh or dried leaves, used as garnish. Used to season poultry and fish. Similar to parsley, but with an anise flavor. Used in *fines herbes* in French cooking. Also in *béarnaise* sauce.

Growth characteristics: Annual herb indigenous to central Asia.

Not illustrated

Apium graveolens**Apiaceae Celery**

Use: Stalks, leaves, and fruits (celery seed). Dried leaves used as an herb.

Growth characteristics: Biennial herb of Eurasian origin.

Libya 1309I (1986)

Carum carvi**Apiaceae Caraway**

Use: Used in stews, sauerkraut, cheeses, breads, and cakes. In alcoholic beverages aquavit, kummel, schnapps, and *Vespétro* liqueur.

Growth characteristics: Biennial herb indigenous to central Europe and Mediterranean.

Yugoslavia 694 (1963); Germany B542 (1977) [illus]



Coriandrum sativum**Apiaceae****Coriander; Cilantro or Chinese Parsley**

Use: Dried fruits used as coriander, fresh leaves as cilantro. Found in Asian, Indian, Middle Eastern, Mexican Latin American, and Scandinavian cooking. Coriander is an ingredient in curry powder and *garam masala*. Also used to season meats, vegetables, and soups. Used in baked goods and liqueurs.

Growth characteristics: Annual herb with Eastern Mediterranean origins.

Mauritius 800 (1995); India 2321e (2009); Israel 1657 (2006) [illus]; Malaysia 1350g-h (2011) [illus]; Singapore 1500 (2011) [illus]

***Cuminum cyminum*****Apiaceae****Cumin**

Use: Fruits (usually called “seeds”) ground or whole. In South Asian, North African, and Latin American cuisines. Used in breads and cheeses, soups and stews. Component of *garam masala* and curry powder.

Growth characteristics: Small annual herb that requires long periods of hot temperatures (>30°C). Indigenous to Mediterranean region.

Ethiopia 1147 (1986) [illus]

***Ferula assa-foetida*****Apiaceae****Assafoetida**

Use: Gum is harvested from cuts made on the stems. Used in Indian cooking with turmeric, especially in *dal*. Used in Worcestershire sauce. Has a strong unpleasant odor.

Growth characteristics: Perennial herb to 2m native to Iran and Afghanistan.

Not illustrated

Foeniculum vulgare**Apiaceae****Fennel**

Use: Leaves, stems, fruits are used. Seeds have anise-like flavor. Leaves are similar to dill. Seeds used in South Asian and Middle Eastern cooking. Florence fennel used as vegetable in German and Italian salads.

Growth characteristics: Perennial herb grows to 1.5m. Indigenous to the Mediterranean region, but found growing worldwide.



Malaysia 1350a-b (2011) [illus]; Pakistan 791 (1993); Palestinian Authority 82 (1998); Tunisia 1382 (2005) [illus]

***Levisticum officinale*****Apiaceae****Lovage**

Use: Seeds used similar to fennel. Leaves used to flavor soups and stews in European cuisine

Growth characteristics: Native to eastern Mediterranean, possibly central Asia.

Not illustrated

Myrrhis odorata **Apiaceae** **Sweet Cicely**

Use: Leaves and fruit used raw or cooked in Germany and Scandinavia.

Growth characteristics: Perennial to 1m native to Europe.

Monaco 1430 (1984) [illus]

***Petroselinum crispum*** **Apiaceae** **Parsley**

Use: Leaves used fresh or dried to flavor or garnish soups, stews, salads in European, Middle Eastern, and American cooking.

Growth characteristics: Small biennial herb from Southern Europe and the Mediterranean.

Not illustrated

Pimpinella anisum **Apiaceae** **Anise**

Use: Dried ripe fruit (often called “seeds”) used whole or ground in confectionaries and liquors (e.g., arak, ouzo, raki, anisette, absinthe).

Growth characteristics: Annual herbaceous plant grows to 0.5m. Do not confuse with Star Anise, *Illicium verum*, (completely unrelated). Design error in Montserrat Sc#1262a and Singapore Sc#1501 shows star anise seedpods with flowers and vegetative parts of *P. anisum*.

Montserrat 1262a (2011) [illus] [design error]; Tunisia 1517 (2011) [illus]

***Artemisia dracunculus*** **Asteraceae** **Tarragon**

Use: Fresh or dried leaves used to season fish, chicken, and egg dishes. Used in *fines herbes* and *béarnaise* sauce of French cuisine.

Growth characteristics: Perennial herb indigenous to Europe and central Asia. Grows to 0.6m

Not illustrated

Borago officinalis **Boraginaceae** **Borage**

Use: As fresh vegetable or dried herb in salads or as garnish. Seeds are used for their oil.

Growth characteristics: Annual herbaceous plant 0.5–1m tall. Native to southern Europe and Mediterranean.

Algeria 1328 (2005) [illus]; Malta 1064 (2001); Paraguay 2620 (1999); Romania 5328 (2012) [illus]

***Armoracia rusticana*** **Brassicaceae** **Horseradish**

Use: Fresh or dried roots mixed with vinegar and used as condiment for meat dishes in Europe and Scandinavia. Pungent taste irritates mucus membranes. Used in ancient Egypt and Greece.

Growth characteristics: Perennial herb with large taproot. Grows to 1.5m. Originated in southeastern Europe.

Not illustrated

Brassica juncea juncea **Brassicaceae** **Brown Mustard, Dijon Mustard**

Use: Ripe seeds used to make a paste used as a condiment, especially popular in France. African and Asian cooking uses leaves as vegetable.

Growth characteristics: A hybrid from the Himalayas.

Not illustrated

Brassica nigra **Brassicaceae** **Mustard**

Use: Ripe seeds crushed to make paste with water or vinegar.

Growth characteristics: Annual herb originated in the Middle East. One parent of *B. juncea*. Grows 0.6–1.2m. Not illustrated

Eruca sativa **Brassicaceae** **Rocket, Arugula**

Use: Fresh leaves used in salads. Used as garnish for soups.

Growth characteristics: Annual herbaceous plant up to 0.8m originally from Mediterranean region.

Not illustrated

Sinapis alba **Brassicaceae** **White mustard**

Use: Ripe seeds crushed mixed with water or wine or roasted whole. Pungent taste.

Growth characteristics: Probably eastern Mediterranean origin.

Ethiopia 1146 (1986) [illus]

***Wasabia japonica*** **Brassicaceae** **Wasabi**

Use: Roots and stem grated or powdered, used as condiment with sushi and sashimi. Hot flavor more like mustard than chili peppers.

Growth characteristics: Perennial herb from Japan.

Not illustrated

Capparis spinosa **Capparidaceae** **Caper**

Use: Unopened flower buds pickled and used as a condiment for fish and meat dishes. Add mustard-like pungency and saltiness.

Growth characteristics: Small shrub found wild in southern Europe and cultivated in Mediterranean countries.

Algeria 847 (1986); Bahrain 412c (1993) & 590g (2003); Cyprus 992 (2002); Jordan 580 (1970) & 2045 (2011) [illus];

Libya 636 (1976), 783 (1979), & 1052e (1983); Morocco 117 (1965); Nauru 53 (1963) & 64 (1966); Qatar 756 (1991); Serbia & Montenegro 278a (2005) [illus]; Turkish Republic Northern Cyprus 673 (2009)

***Juniperus communis*** **Cupressaceae** **Juniper**

Use: Ripe fresh or dried berries. Especially popular in Scandinavian cooking for meat dishes. Also sauerkraut. Flavor for gin.

Growth characteristics: Evergreen shrub or tree to 6m indigenous to north temperate regions.

Finland B185 (1969); Faroe Is. 564 (2011) [illus]; Liechtenstein 354 (1960); Slovenia 327a (1998); Sweden 2162 (1996) & 2583a–b (2008) [illus]; Tunisia 507 (1968); Yugoslavia 543 (1959)



Trigonella foenum-graecum* Fabaceae*Fenugreek**

Use: Ripe seeds whole or powdered and used in curry. Also in Persian and Ethiopian cooking.

Growth characteristics: Annual herb up to 0.8m from southern Europe and western Asia. Jordan 2051 (2011) [illus]

***Crocus sativus*****Iridaceae****Saffron**

Use: Stigmas and style from flowers, dried and used to color and flavor cheese, butter, pastries. Used in *bouillabaisse* and *paella*. Extensive use in Indian, Turkish, and Persian cuisine.

Growth characteristics: Small perennial that re-grows from a bulb, native to southern Europe.

Guyana 3810 (2003); Italy 2891 (2008) [illus]; St Vincent 3749a (2011); Turkey 2781 (2000)

Lavandula angustifolia**Lamiaceae****Lavender**

Use: Dried flower buds used as condiment and to flavor cheeses. Leaves can substitute for rosemary.

Growth characteristics: Small shrub 1–2m native to western Mediterranean.

Japan Z736 (2006), Z774 (2007); Oman 4571 (2004); Tunisia 1384 (2005) [illus]; United Arab Emirates 625 (1998); USA 4508 & 4516 (2011) [illus]

***Hyssopus officinalis*****Lamiaceae****Hyssop**

Use: Fresh or dried leaves used in salads, soups, meat dishes. Flavor of licorice and mint.

Growth characteristics: Perennial to 0.6m, native to southern Europe.

Yugoslavia 599 (1961) [illus]

***Melissa officinalis*****Lamiaceae****Lemon Balm**

Use: Fresh or dried leaves used in eggs, stews, chicken, and fish dishes. Imparts lemon flavor.

Growth characteristics: Perennial herb to 0.5m from eastern Mediterranean, Asia Minor.

Not illustrated

Mentha arvensis**Lamiaceae****Field Mint**

Use: Fresh leaves used in Thai, Malaysian, Japanese, and Indian cooking. Used raw or cooked, fresh or dried, flavors sweets and beverages.

Growth characteristics: Native in temperate regions, with creeping stems, 0.2–0.8m tall.

Not illustrated

Mentha x piperita**Lamiaceae****Peppermint**

Use: Fresh or dried leaves used to flavor confectionary items and drinks.

Growth characteristics: Perennial herb, hybrid of *Mentha spicata* and *M. aquatica*.

Bulgaria 838 (1953); Croatia 557 (2004); DDR 496 (1960); Israel 1659 (2006) [illus]; Malaysia 1394 (2011) [illus]; Poland 2413 (1980); Romania 1299 (1959); Yemen (1965); Yugoslavia 776 (1965)



Mentha spicata **Lamiaceae** **Spearmint**

Use: Leaves used fresh, dried or frozen for flavoring confectionary items. Used with lamb in English cooking.

Growth characteristics: Perennial herb, native to Europe and Asia, grows 0.3–1m.

Not illustrated

Ocimum basilicum **Lamiaceae** **Basil**

Use: Strongly linked to Italian cuisine in soups and sauces. Also used in Southeast Asian cooking in vegetable and meat dishes.

Growth characteristics: Probably native to India, grows 0.3–0.5m.

Cyprus 993 (2002); Ethiopia 1145 (1986); Fr. Polynesia 451 (1986); Jordan 2048 (2011) [illus]; Netherlands Antilles 1200 (2008); Sweden 2624a (2009) [illus]

***Origanum majorana*** **Lamiaceae** **Marjoram**

Use: Fresh leaves used for meat, poultry, salads, fish, especially in European cooking.

Growth characteristics: Perennial herb from Asia Minor, grows to 0.5m.

St Vincent 830 (1985); Tunisia 1385 (2005) [illus]

***Origanum vulgare*** **Lamiaceae** **Oregano**

Use: Fresh or dried leaves used in tomato dishes, especially pizza, and other meat dishes of a variety of cuisines.

Growth characteristics: Native to Europe and central Asia, grows as a perennial to 0.5m.

Liechtenstein 1009 (1993); USA 4505 & 4513 (2011) [illus]

***Perilla frutescens*** **Lamiaceae** **Perilla, Shiso**

Use: Fresh or pickled leaves used in Japanese sashimi, Chinese, Korean, and Southeast Asian cooking.

Growth characteristics: Annual herb, green or purple, indigenous to eastern Asia.

Not illustrated

Plectranthus amboinicus **Lamiaceae** **Indian borage**

Use: Fresh leaves flavor meat dishes in Indonesia and Malaysia. Can substitute for oregano.

Growth characteristics: Perennial that grows to 0.7m. Indigenous to southeastern Africa.

Not illustrated

Rosmarinus officinalis **Lamiaceae** **Rosemary**

Use: Fresh or dried leaves season meat, game, pork, sausage, poultry, stews, sauces, soups, and salads. Bitter, astringent taste.

Growth characteristics: Evergreen shrub, indigenous to the Mediterranean and Caucasus regions.

Gambia 2410e (2001); Montserrat 1262e (2011); Sweden 2507b (2005) & 2624c (2009) [illus]; Tunisia 1519 (2011) [illus]



Salvia officinalis**Lamiaceae****Sage**

Use: Fresh or dried leaves. Component of Italian and Balkan cooking. Used to season meat dishes, poultry, fish, and vegetables. In America and Britain, used for sage and onion stuffing for turkey or chicken.

Growth characteristics: Native to southern Europe and Mediterranean. Perennial shrub to 0.6m.

Greece, Mt. Athos 63 (2010); Jordan 2049 (2011) [illus]; Montenegro 242 (2010); Poland 2415 (1980); USA 4509 & 4517 (2011) [illus]

***Satureja hortensis*****Lamiaceae****Summer Savory**

Use: Fresh or dried stem tips with leaves used to flavor meats and stews and bean dishes.

Growth characteristics: Annual herbaceous plant grows to 0.6m, native to southeastern Europe

Not illustrated

Thymus vulgaris**Lamiaceae****Thyme**

Use: Fresh or dried leaves used for soups and stuffing, meat, poultry and fish dishes. Used in a *bouquet garni* with other herbs.

Growth characteristics: Originated in Mediterranean and southeast Italy. Perennial low-growing shrub.

France 3648 (2009) [illus]; Palestinian Authority 56 (1996)

***Laurus nobilis*****Lauraceae****Bay**

Use: Fresh or dried leaves used in soups, stews, poultry, and meat dishes in European cuisines. Often used in a *bouquet garni*.

Growth characteristics: Shrub or small tree native to the Mediterranean.

Algeria 1270 (2002); Dominica 466 (1975); Gambia 2407 (2001); Greece 1217 (1977); Greece, Mt Athos 52 (2010) [illus]; Grenada Grenadines 2487 (2003); Israel 1700 (2007); Oman 367m (1994); Russia 4648, 4654, 4660 (1978); UN 373 (1982); Yugoslavia 858 (1967) & 1544 (1981)

***Myrtus communis*****Myrtaceae****Myrtle**

Use: Leaves and berries used in Sardinian and Corsican cuisine for meat dishes.

Growth characteristics: Evergreen shrub to 2–3m native to Mediterranean.

Cyprus 990 (2002); Greece 1886 (1989); Grenada-Grenadines 1840c (1996); Israel 204 (1961); Malta 1106 (2003); Tunisia 1321b & 1327 (2003) [illus]; Turkey 2804 (2004)

***Syzygium polyanthum*****Myrtaceae****Salam Leaf, Daun Salam, Indonesian Bay Leaf**

Use: Fresh or dried leaves used to season meat dishes in Indonesian cooking.

Growth characteristics: Evergreen tree native to south Asia.

Not illustrated

***Pandanus amaryllifolius* Pandanaceae Pandan**

Use: Fresh or dried leaves used in Thai, Malay, and Indonesian cooking.

Growth characteristics: Large shrub that may have originated as an ancient cultivar.

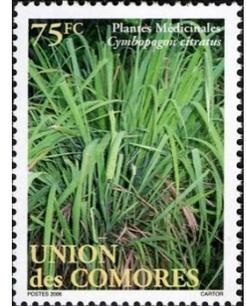
Not illustrated

Cymbopogon citratus**Poaceae****Lemon Grass**

Use: Fleshy leaf bases used in Asian cuisines to season poultry, seafood, fish, and beef.

Growth characteristics: Perennial native to southern India and Sri Lanka

Angola 1263 (2004) [illus]; Comoro Islands 987 & 990 (2007) [illus]; Dominican Republic 1289c (1998); Montserrat 1262b (2011); St Thomas & Prince 714 (1983)

***Persicaria odorata*****Polygonaceae****Vietnamese Mint, Laksa Leaf, Rau Ram**

Use: Fresh leaves used as garnish in Singapore and Malaysian seafood soup known as *laksa*. Also used in salads in Thai and Vietnamese cooking.

Growth characteristics: Perennial native to Southeast Asia.

Not illustrated

Rumex acetosa**Polygonaceae****Sorrel**

Use: Fresh leaves used in French cuisine. Used like spinach in many cultures.

Growth characteristics: Indigenous to Europe and northern Asia. Perennial herb to 0.6m.

Not illustrated

Portulaca oleracea**Portulacaceae****Purslane**

Use: Fresh leaves used as garnish or eaten like spinach.

Growth characteristics: Cosmopolitan weed up to 0.4m.

China (Taiwan) 3163 (1998) [illus]; Surinam 1003 (1995)

***Nigella sativa*****Ranunculaceae****Black Cumin**

Use: Ripe seeds used as condiment or pepper substitute in Indian and Middle Eastern cooking.

Growth characteristics: Annual herbaceous plant to 0.4m, native to southern Europe, northern Africa, and western Asia.

Not illustrated

Rhamnus prinoides**Rhamnaceae****Geisho**

Use: Flavors locally brewed beer.

Growth characteristics: Native to Sub-Saharan Africa, cultivated in Ethiopia. Small tree to 6m.

Ethiopia 1678-81 (2004) [illus]

***Sanguisorba minor*****Rosaceae****Salad Burnet**

Use: Fresh leaves used in soups and marinades. Reminiscent of cucumber.

Growth characteristics: Perennial herb from central and southern Europe grows to 0.6m.

Not illustrated

***Murraya koenigii* Rutaceae Curry Leaf**

Use: Fresh or dried leaves used especially in southern Indian cooking, also in Malaysia and Indonesia cuisines.

Growth characteristics: Evergreen tree grows 3–6m, native to India and Sri Lanka.

St. Vincent 3749c (2011) [illus]

***Ruta graveolens* Rutaceae Rue, Herb-of-Grace**

Use: Fresh leaves, used sparingly because of bitter and pungent taste, to flavor sausage and marinades. Used in Ethiopia, Greece, and other Mediterranean countries. In Italy to flavor brandy called *grappa alla ruta*.

Growth characteristics: Indigenous to southern Europe. Perennial shrub

Gibraltar 946 (2003) [illus]

***Zanthoxylum piperitum* Rutaceae Sichuan pepper**

Use: Ripe capsule and seeds used in Sichuan dishes in Chinese cuisine.

Growth characteristics: Small deciduous tree grows to 4m, native to East Asia

Not illustrated

***Citrus hystrix* Rutaceae Kaffir lime**

Use: Rind used in Lao and Thai cooking for aroma and astringency. Leaves used in Vietnamese and Indonesian dishes to give lemon flavor.

Growth characteristics: Small thorny tree, 3–6m native to Southeast Asia.

France (Mayotte) 254d (2009); Malaysia 1395 (2012) [illus]

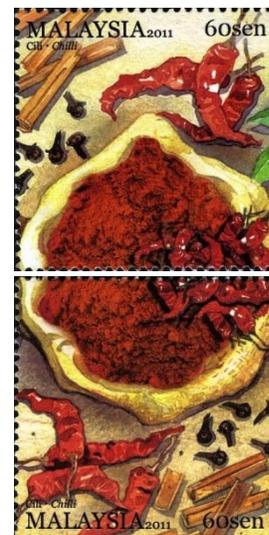
***Capsicum annuum* Solanaceae Sweet Pepper, Paprika, Chili Pepper**

Use: Green or mature fruit eaten cooked or raw, chopped into salads and vegetable dishes. Important in many countries.

Growth characteristics: Indigenous to Central and South America, grows to 1m. Annual herb that includes bell peppers and jalapeños. Fruit color varies from yellow and orange to red.

Albania 2843c (2007); Algeria 904b (1989); Cuba 5005 (2009); Curaçao 61d (2011); Great Britain 2111 (2003); Guinea-Bissau 878 (1989); Hungary 4240a (2012); India 2321e (2009) [illus];

Jordan 2000g (2009); Libya 1619j (1998); Malaysia 1350e–f (2011) [illus]; Nevis 735 (1992); Romania 1541 (1963) & 5362 (2012); Salvador 1377 (1994); St. Vincent 3749b (2011); Sweden 2624b (2009) [illus]; Tanzania 2522f (2008); Tunisia 1486 (2010); USA 4003, 4008, & 4013 (2006); Zimbabwe 952 (2003)



Capsicum frutescens**Solanaceae****Chili Pepper**

Use: Fresh or dried fruit used for its hot spicy flavor. Vary from mild to extremely hot “habañoero.”



Growth characteristics: Perennial herbaceous plant originally from Central and South America. Ripe fruit can be pale yellow to bright red.

Bulgaria 1022 (1958); Libya 1309g (1986); Jordan 200h (2009) [illus]; Montserrat 162 (1964); St Vincent 829 (1985); Tanzania 2522f (2008) [illus]

***Tropaeolum majus*****Tropeolaceae****Nasturtium, Indian Cress**

Use: Flowers and buds, leaves, seeds and tubers. Pickled seeds substitute for capers. Leaves give tangy flavor to salads.

Growth characteristics: Native to Peru and Bolivia. Creeper with fleshy stems.



Austria 719 (1964); Czech Republic 3346 (2007) [illus]; Peru 880 (1986) & 919 (1987); Poland 1435 (1966) & 2056 (1974); Switzerland B290 (1959); Tanzania 2025c (1999); Ukraine 606 (2005) [illus]

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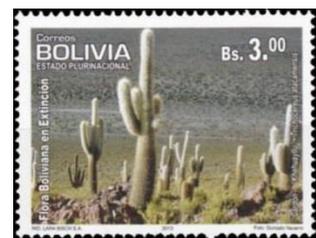
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ELEPHANT CACTUS: BOLIVIA

On 9 July 2013, Bolivia issued a set of four stamps depicting indigenous flora in danger of extinction. The 3-boliviano value shows a stand of *Pachycereus pringlei*, also known as Elephant Cactus. This species originated in Baja California, but it grows also in the Andean ranges of Bolivia, Peru, Chile, and Argentina. It is the largest cactus in the world. People often mistake it for the saguaro cactus, which only grows farther north.

This cactus can grow to a height of 60 feet and weigh up to 25 tons. Many specimens reach the age of well over 300 years. Due to its symbiotic relationship with bacterial and fungal colonies on its roots, it can grow on bare rock where no soil exists at all.

The cactus is endangered by loss of habitat due to land clearing for cultivation.



Answer to the riddle on the cover: ***Basil* and *Lavender* take *Thyme* to give *Sage* advice to *Rosemary*.**

FRANCE ANIMALS IN ART

On 4 January 2013, France issued a self-adhesive booklet pane of 12 stamps (Sc#4316–27) depicting 12 different objets d'art in the form of animals. The stamps went on general sale on 7 January 2013. This issue shows a spectrum of animals across multiple classes: nine mammals, one bird, one reptile, and one fantasy creature.

Phil@poste printed 5.6 million of the booklets in four colors using photogravure. The designer was Christelle Guénot. Each stamp measures 37½×24mm and is die cut 11.

The denomination is the *lettre verte* or “green letter” rate for domestic letters weighing less than 20 grams. The *lettre verte* rate takes two days for delivery rather than one with the standard *lettre prioritaire*. The *lettre verte* rate at the time of issue was 58c as opposed to 63c for *lettre prioritaire*.



Reclining Goat: Gilt Bronze by Jane Poupelet (1874–1932) sculpted in 1902 (Centre Georges-Pompidou, Paris)



Rabbit: Terracotta from the workshop of Bernard Palissy (c.1510–c.1590) (Musée de la Renaissance, Ecouen)



Reclining Buffalo: Gilt Bronze (Musée Guimet, Paris)



Rooster: Brass (Musée de l'Armée, Paris)



Standing Tiger: Bronze by Antoine Louis Barye (1796–1875) (Musée du Louvre, Paris)



Rats and Egg: Porcelain by Peters (Musée Adrien Dubouché, Limoges) (*This is my favorite.*)



Pig: Glazed Terracotta (Cité de la Céramique, Sèvres)



Walking Chimpanzee: Bronze by Jacques Lehman (1881–1974) (La Piscine, Roubaix)



Great Dane Dog: Enameled Stoneware by Georges Gardet (1863–1939) (La Piscine, Roubaix)



Dragon: Faience (Cité de la Céramique, Sèvres)



Serpent: Gold (Musée du Louvre, Paris)



Walking Horse: Bronze by Edgar Degas (1834–1917) (Musée d'Orsay, Paris)

GUINEA-BISSAU (continued)

Margin	UL: Artist's Bracket, <i>Ganoderma applanatum</i>	Ganodermataceae	Z
	UR: Clouded Agaric, <i>Clitocybe nebularis</i>	Tricholomataceae	Z
SS 2000fr	Bare-toothed Russula, <i>Russula vesca</i>	Russulaceae	A
Margin	ML: Birch Bolete, <i>Leccinum scabrum</i>	Boletaceae	Z
	LL & Mid: Black Jelly Roll, <i>Exidia glandulosa</i>	Auriculariaceae	Z
	UR: Half-free Morel, <i>Morchella semilibera</i>	Morchellaceae	Z
	LR: Wood Ear, <i>Auricularia auricula-judae</i>	Auriculariaceae	Z

NIGER**2013 July 1** (Mushrooms & Owls)

The MS of 4 has two Owl stamps with mushrooms in the background and two Mushroom stamps with owls in the background. The SS contains one owl stamp with mushrooms in the margin.

a	750fr	U/I mushrooms (background)		U B
b	750fr	Slimy Spike-cap, <i>Gomphidius glutinosus</i>	Gomphidiaceae	A
c	750fr	U/I mushrooms (background)		U B
d	750fr	Shingled Hedgehog, <i>Sarcodon imbricatus</i>	Bankeraceae	A
		MS of 4 s/t		
SS 2500fr	Margin:	Bitter Bolete, <i>Tylopilus felleus</i>	Boletaceae	Z

PORTUGAL**2013 August 29** (1000 Years Canon of Avicenna)

Single stamp with portrait of Avicenna holding some sort of plant. Offset in four colors by Cartor.

€1.70	U/I specimen			C U
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SPAIN**2013 October 8** (Mushrooms) (Horiz strip of three s/t stamps)

37c	Yellow-stainer, <i>Agaricus xanthodermus</i>	Agaricaceae	A
37c	Scotch Bonnet, <i>Marasmius oreades</i>	Marasmiaceae	A
37c	Panther Cap, <i>Amanita pantherina</i>	Amanitaceae	A

ST. THOMAS & PRINCE ISLANDS **2013 August 15** (Mushrooms)

25000d	Scarlet Waxy Cap, <i>Hygrocybe punicea</i>	Hygrophoraceae	A
25000d	Death Cap, <i>Amanita phalloides</i>	Amanitaceae	A
25000d	Greville's Bolete, <i>Suillus grevillei</i>	Suillaceae	A
25000d	Field Mushroom, <i>Agaricus campester</i> (= <i>campestris</i>)	Agaricaceae	A
	MS of 4 s/t		
SS 96000d	Bitter Beech Bolete, <i>Boletus calopus</i>	Boletaceae	A
Margin	Orange Birch Bolete, <i>Leccinum testaceo-scabrum</i>	Boletaceae	Z

TOGO**2013 June 3** (Discovery of Penicillin 85th anniv.)

750fr	Common Morel, <i>Morchella esculenta</i>	Morchellaceae	B
750fr	Chanterelle, <i>Cantharellus cibarius</i>	Cantharellaceae	B
750fr	Penny Bun, <i>Boletus edulis</i> (Cap: <i>B. solidus</i>)	Boletaceae	B
750fr	Oyster Mushroom, <i>Pleurotus ostreatus</i>	Pleurotaceae	B
	MS of 4 s/t (with lab cultures and Fleming portrait)		
SS 2500fr	Field Mushroom, <i>Agaricus campestris</i>	Agaricaceae	B
Margin	Top: Death Cap, <i>Amanita phalloides</i>	Amanitaceae	Z
	UR: False Death Cap, <i>Amanita citrina</i> (Cap: <i>Agaricus mappa</i>)	Amanitaceae	Z
	UL: Fly Agaric, <i>Amanita muscaria</i> (Cap: <i>Agaricus muscarius</i>)	Amanitaceae	Z

2013 July 22 (Mushrooms & Butterflies)

b	750fr	Violet Webcap, <i>Cortinarius violaceus</i>	Cortinariaceae	A
d	750fr	Orange Webcap, <i>Cortinarius mucosus</i>	Cortinariaceae	A
		MS of 4 s/t		
SS 2500fr	Margin:	Grass-green Russula, <i>Russula aeruginea</i>	Russulaceae	Z



MAMMALIA

Editor

Michael Prince, LM68



Scott#	Denom	Common Name/Scientific Name	Family/Subfamily
AITUTAKI		2012 June 22 (Cetaceans)	
581	20c	Humpback Whale, <i>Megaptera novaeangliae</i>	Balaenopteridae
582	30c	Humpback Whale, <i>Megaptera novaeangliae</i>	Balaenopteridae
583	50c	Humpback Whale, <i>Megaptera novaeangliae</i>	Balaenopteridae
584	80c	Striped Dolphin, <i>Stenella coeruleoalba</i>	Delphinidae
585	90c	Striped Dolphin, <i>Stenella coeruleoalba</i>	Delphinidae
586	\$1	Striped Dolphin, <i>Stenella coeruleoalba</i>	Delphinidae
587	\$1.10	Striped Dolphin, <i>Stenella coeruleoalba</i>	Delphinidae
588	\$1.20	Striped Dolphin, <i>Stenella coeruleoalba</i>	Delphinidae
589	\$5	Striped Dolphin, <i>Stenella coeruleoalba</i>	Delphinidae
590	\$6	Humpback Whale, <i>Megaptera novaeangliae</i>	Balaenopteridae
591	\$7.50	Humpback Whale, <i>Megaptera novaeangliae</i>	Balaenopteridae
592	\$10	Humpback Whale, <i>Megaptera novaeangliae</i>	Balaenopteridae
593		MS of 12 (Sc#593a-l) (like Sc#581-92 with dark blue frame)	Balaenopteridae
ARGENTINA		2012 December 22 (Bats)	
2668a	3p	Little Yellow-shouldered Bat, <i>Sturnira lilium</i> (in flight) (Ed. Note: <i>Phyllostomatidae</i> of some)	Phyllostomidae
2668b	3p	Little Yellow-shouldered Bat, <i>Sturnira lilium</i> (hanging)	Phyllostomidae
2668c	3p	Thomas's Big-eared Brown Bat, <i>Histiotus laeophotis</i>	Vespertilionidae new
2668d	3p	Small Big-eared Brown Bat, <i>Histiotus montanus</i>	Vespertilionidae new
2668e	3p	Big-eared Woolly Bat, <i>Chrotopterus auritus</i> (in flight)	Phyllostomidae new
2668f	3p	Big-eared Woolly Bat, <i>Chrotopterus auritus</i> (head)	Phyllostomidae new
2668g	3p	Greater Bulldog Bat, <i>Noctilio leporinus</i> (head)	Noctilionidae
2668h	3p	Greater Bulldog Bat, <i>Noctilio leporinus</i> (in flight)	Noctilionidae
2668		MS of 8 (Sc#2668a-h)	
ARMENIA		2012 December 28 (Mammals)	
934	230d	Small Five-toed Jerboa, <i>Allactaga elater</i>	Dipodidae new
935	330d	Mouflon, <i>Ovis orientalis</i>	Bovidae
935a		Horiz pair (Sc#934-35)	
AUSTRALIA		2013 April 2 (Baby Animals) (perf 14¾×14)	
3890	\$1.75	Southern Hairy-nosed Wombat, <i>Lasiorchinus latifrons</i>	Vombatidae
3891	\$2.60	Short-beaked Echidna, <i>Tachyglossus aculeatus</i>	Tachyglossidae
3892	\$4.65	Platypus, <i>Ornithorhynchus anatinus</i>	Ornithorhynchidae
3893	\$6.45	Common Brushtail Possum, <i>Trichosurus vulpecula</i> Bklt stamps (die cut 11¼, s/a)	Phalangeridae
3895	\$1.75	Southern Hairy-nosed Wombat, <i>Lasiorchinus latifrons</i>	Vombatidae
3895a		Bklt pane 5 (Sc#3895)	
3896	\$2.60	Short-beaked Echidna, <i>Tachyglossus aculeatus</i>	Tachyglossidae
3896a		Bklt pane 5 (Sc#3896)	

BRAZIL		2012 June 5 (Wild Cats)			
3220a	(1.10r)	Jaguarundi, <i>Puma yagouaroundi</i>		Felidae	
3220b	(1.10r)	Ocelot, <i>Leopardus pardalis</i>		Felidae	
3220		Vert pair (Sc#3220a–b)			
CHINA P.R.		2012 December 1 (Confucius Institute)			
4059b	\$3	Giant Panda, <i>Ailuropoda melanoleuca</i>		Ursidae	
4059		Horiz pair (Sc#4059a–b)			
CHINA (Taiwan)		2012 November 7 (Protected Mammals)			
4073	\$5	Masked Palm Civet, <i>Paguma larvata</i>		Viverridae	
4074	\$5	Least Weasel, <i>Mustela nivalis</i>		Mustelidae	
4075	\$10	Yellow-throated Marten, <i>Martes flavigula</i>		Mustelidae	
4076	\$25	Small Indian Civet, <i>Viverricula indica</i>		Viverridae	new
ESTONIA		2013 June 6 (Weasel)			
733	45c	Least Weasel, <i>Mustela nivalis</i>		Mustelidae	
HUNGARY		2013 April 9 (Mammals)			
4274	110fo	Stoat (Ermine), <i>Mustela erminea</i>		Mustelidae	
4275	140fo	Eurasian Pygmy Shrew, <i>Sorex minutus</i>		Soricidae	
4276	230fo	Eurasian Lynx, <i>Lynx lynx</i>		Felidae	
4277	390fo	Mouse-eared Bat, <i>Myotis myotis</i>		Vespertilionidae	
4278	SS 600fo	Northern White-breasted Hedgehog, <i>Erinaceus roumanicus</i>		Erinaceidae	new
LIECHTENSTEIN		2013 June 3 (Baby Animals)			
1578	85rp	Alpine Ibex, <i>Capra ibex</i>		Bovidae	
1579	100rp	Alpine Chamois, <i>Rupicapra rupicapra</i>		Bovidae	
1580	140rp	Alpine Marmot, <i>Marmota marmota</i>		Sciuridae	
1581	190rp	Mountain Hare, <i>Lepus timidus</i>		Leporidae	
MEXICO		2013 April 6 (60th Anniv.Diplomatic Relations with Indonesia)			
2818	15p	Bornean Clouded Leopard, <i>Neofelis diardi</i>		Felidae	new
2819	15p	Jaguar, <i>Panthera onca</i>		Felidae	
2819a		Horiz pair (Sc#2818–19)			
MOZAMBIQUE		2011 August 30 (Animals of Mozambique)			
2341a	16m	Scrub Hare, <i>Lepus saxatilis</i> (name at left)		Leporidae	
2341b	16m	Scrub Hare, <i>Lepus saxatilis</i> (name at right)		Leporidae	
2341c	16m	Cape Hare, <i>Lepus capensis</i> (three hares)		Leporidae	
2341d	16m	Cape Hare, <i>Lepus capensis</i> (one hare)		Leporidae	
2341e	66m	Cape Hare, <i>Lepus capensis</i>		Leporidae	
2341f	92m	Cape Hare, <i>Lepus capensis</i>		Leporidae	
2341		MS of 6 (Sc#2341a–f) (Hares)			
2342a	16m	Lord Derby's Scaly-tailed Squirrel, <i>Anomalurus derbianus</i>		Anomaluridae	
2342b	16m	Cape Porcupine, <i>Hystrix africaeausstralis</i>		Hystriidae	
2342c	16m	Spring Hare, <i>Pedetes capensis</i>		Pedetidae	
2342d	16m	Mutable Sun Squirrel, <i>Heliosciurus mutabilis</i>		Sciuridae	new
2342e	66m	Red Bush Squirrel, <i>Paraxerus palliatus</i>		Sciuridae	
2342f	92m	Rock Dormouse, <i>Graphiurus platyops</i>		Gliridae	new
		(Ed. Note: <i>Myoxidae</i> of some)			
2342		MS of 6 (Sc#2342a–f) (Rodents)			

MOZAMBIQUE (continued)

2343a	16m	Ground Pangolin, <i>Manis temminckii</i> (name at LL)	Manidae	
2343b	16m	Aardvark, <i>Orycteropus afer</i> (name at UR)	Orycteropodidae	
2343c	16m	Aardvark, <i>Orycteropus afer</i> (name at left)	Orycteropodidae	
2343d	16m	Ground Pangolin, <i>Manis temminckii</i> (name at UR)	Manidae	
2343e	66m	Ground Pangolin, <i>Manis temminckii</i>	Manidae	
2343f	92m	Aardvark, <i>Orycteropus afer</i>	Orycteropodidae	
2343		MS of 6 (Sc#2343a–f) (Pangolins & Aardvarks)		
2344a	16m	Gerenuk, <i>Litocranius walleri</i>	Bovidae	
2344b	16m	Impala, <i>Aepyceros melampus</i>	Bovidae	
		Cheetah, <i>Acinonyx jubatus</i>	Felidae	
2344c	16m	Beisa Oryx, <i>Oryx beisa</i>	Bovidae	
2344d	16m	Blue Wildebeest, <i>Connochaetes taurinus</i>	Bovidae	
2344e	66m	Sitatunga, <i>Tragelaphus spekii</i>	Bovidae	
2344f	92m	Eland, <i>Taurotragus oryx</i>	Bovidae	
2344		MS of 6 (Sc#2344a–f) (Bovids)		
2345a	16m	African Wild Dog, <i>Lycaon pictus</i> (three dogs)	Canidae	
2345b	16m	African Wild Dog, <i>Lycaon pictus</i> (two dogs)	Canidae	
2345c	16m	African Wild Dog, <i>Lycaon pictus</i>	Canidae	
		Blue Wildebeest, <i>Connochaetes taurinus</i>	Bovidae	
2345d	16m	African Wild Dog, <i>Lycaon pictus</i> (with animal head)	Canidae	
2345e	66m	African Wild Dog, <i>Lycaon pictus</i>	Canidae	
2345f	92m	African Wild Dog, <i>Lycaon pictus</i>	Canidae	
2345		MS of 6 (Sc#2345a–f) (African Hunting Dogs)		
2346a	16m	Hippopotamus, <i>Hippopotamus amphibius</i> (open mouths)	Hippopotamidae	
2346b	16m	Hippopotamus, <i>Hippopotamus amphibius</i> (facing left)	Hippopotamidae	
2346c	16m	Hippopotamus, <i>Hippopotamus amphibius</i> (closed mouths)	Hippopotamidae	
2346d	16m	Hippopotamus, <i>Hippopotamus amphibius</i> (three hippos)	Hippopotamidae	
2346e	66m	Hippopotamus, <i>Hippopotamus amphibius</i>	Hippopotamidae	
2346f	92m	Hippopotamus, <i>Hippopotamus amphibius</i>	Hippopotamidae	
2346		MS of 6 (Sc#2346a–f) (Hippopotamuses)		
2347a	16m	Black Rhinoceros, <i>Diceros bicornis</i> (Dürer drawing)	Rhinocerotidae	
2347b	16m	White Rhinoceros, <i>Ceratotherium simum</i> (three animals)	Rhinocerotidae	
2347c	16m	White Rhinoceros, <i>Ceratotherium simum</i> (adult & juvenile)	Rhinocerotidae	
2347d	16m	Black Rhinoceros, <i>Diceros bicornis</i>	Rhinocerotidae	
2347e	66m	White Rhinoceros, <i>Ceratotherium simum</i>	Rhinocerotidae	
2347f	92m	Black Rhinoceros, <i>Diceros bicornis</i>	Rhinocerotidae	
2347		MS of 6 (Sc#2347a–f) (Rhinoceroses)		
2348a	16m	South African Fur Seal, <i>Arctocephalus pusillus</i>	Otariidae	
2348b	16m	Southern Elephant Seal, <i>Mirounga leonina</i> (name at UL)	Phocidae	
2348c	16m	Southern Elephant Seal, <i>Mirounga leonina</i> (name at left)	Phocidae	
2348d	16m	Southern Elephant Seal, <i>Mirounga leonina</i> (name at LL)	Phocidae	
2348e	66m	Southern Elephant Seal, <i>Mirounga leonina</i>	Phocidae	
2348f	92m	South African Fur Seal, <i>Arctocephalus pusillus</i>	Otariidae	
2348		MS of 6 (Sc#2348a–f) (Seals)		
2349a	16m	Brown Greater Galago, <i>Otolemur crassicaudatus</i>	Galagidae	
2349b	16m	Malawi Bushbaby, <i>Galago nyasae</i>	Galagidae	new
		Brown Greater Galago, <i>Otolemur crassicaudatus</i>	Galagidae	
2349c	16m	Vervet Monkey, <i>Chlorocebus pygerythrus</i>	Cercopithecidae	
2349d	16m	Blue Monkey, <i>Cercopithecus mitis</i>	Cercopithecidae	

MOZAMBIQUE (continued)

2349e	66m	Chacma Baboon, <i>Papio ursinus</i>	Cercopithecidae
2349f	92m	Yellow Baboon, <i>Papio cynocephalus</i>	Cercopithecidae
		Impala, <i>Aepyceros melampus</i>	Bovidae
2349		MS of 6 (Sc#2349a–f) (Primates)	
2350a	16m	Blasius's Horseshoe Bat, <i>Rhinolophus blasii</i>	Rhinolophidae
2350b	16m	Egyptian Rousette, <i>Rousettus aegyptiacus</i>	Pteropodidae
2350c	16m	Mauritian Tomb Bat, <i>Taphozous mauritianus</i>	Emballonuridae new
2350d	16m	Wahlberg's Epauletted Fruit Bat, <i>Epomophorus wahlbergi</i>	Pteropodidae
2350e	66m	Straw-colored Fruit Bat, <i>Eidolon helvum</i>	Pteropodidae
2350f	92m	Common Noctule, <i>Nyctalus noctula</i>	Vespertilionidae
2350		MS of 6 (Sc#2350a–f) (Bats)	
2351a	16m	Lion, <i>Panthera leo</i>	Felidae
		Burchell's Zebra, <i>Equus quagga</i>	Equidae
2351b	16m	Lion, <i>Panthera leo</i> (with two lionesses)	Felidae
2351c	16m	Lion, <i>Panthera leo</i> (with one lioness)	Felidae
2351d	16m	Lion, <i>Panthera leo</i> (lioness)	Felidae
		Burchell's Zebra, <i>Equus quagga</i>	Equidae
2351e	66m	Lion, <i>Panthera leo</i>	Felidae
2351f	92m	Lion, <i>Panthera leo</i>	Felidae
		African Buffalo, <i>Syncerus caffer</i>	Bovidae
2351		MS of 6 (Sc#2351a–f) (Lions)	
2352a	16m	Caracal, <i>Caracal caracal</i>	Felidae
2352b	16m	Cheetah, <i>Acinonyx jubatus</i>	Felidae
2352c	16m	Leopard, <i>Panthera pardus</i>	Felidae
2352d	16m	Serval, <i>Leptailurus serval</i>	Felidae
2352e	66m	Serval, <i>Leptailurus serval</i>	Felidae
2352f	92m	Cheetah, <i>Acinonyx jubatus</i>	Felidae
2352		MS of 6 (Sc#2352a–f) (Wild Cats)	
2353a	16m	African Bush Elephant, <i>Loxodonta africana</i> (four elephants)	Elephantidae
2353b	16m	African Bush Elephant, <i>Loxodonta africana</i> (facing left)	Elephantidae
2353c	16m	African Bush Elephant, <i>Loxodonta africana</i> (facing forward)	Elephantidae
2353d	16m	African Bush Elephant, <i>Loxodonta africana</i> (facing right)	Elephantidae
2353e	66m	African Bush Elephant, <i>Loxodonta africana</i>	Elephantidae
2353f	92m	African Bush Elephant, <i>Loxodonta africana</i>	Elephantidae
2353		MS of 6 (Sc#2353a–f) (African Elephants)	
2354a	16m	Dugong, <i>Dugong dugon</i> (name at left)	Dugongidae
2354b	16m	Dugong, <i>Dugong dugon</i> (name at UL)	Dugongidae
2354c	16m	Dugong, <i>Dugong dugon</i> (name at LR)	Dugongidae
2354d	16m	Dugong, <i>Dugong dugon</i> (name at right)	Dugongidae
2354e	66m	Dugong, <i>Dugong dugon</i>	Dugongidae
2354f	92m	Dugong, <i>Dugong dugon</i>	Dugongidae
2354		MS of 6 (Sc#2354a–f) (Dugongs)	
2355a	16m	Indo-pacific Humpbacked Dolphin, <i>Sousa chinensis</i>	Delphinidae
2355b	16m	Striped Dolphin, <i>Stenella coeruleoalba</i>	Delphinidae
2355c	16m	Spinner Dolphin, <i>Stenella longirostris</i>	Delphinidae
2355d	16m	Rough-toothed Dolphin, <i>Steno bredanensis</i>	Delphinidae
2355e	66m	Common Bottlenose Dolphin, <i>Tursiops truncatus</i>	Delphinidae
2355f	92m	Fraser's Dolphin, <i>Lagenodelphis hosei</i>	Delphinidae
2355		MS of 6 (Sc#2355a–f) (Dolphins)	

MOZAMBIQUE (continued)

2356a	16m	Pygmy Killer Whale, <i>Feresa attenuata</i>	Delphinidae
2356b	16m	Killer Whale, <i>Orcinus orca</i>	Delphinidae
2356c	16m	Humpback Whale, <i>Megaptera novaeangliae</i>	Balaenopteridae
2356d	16m	Sperm Whale, <i>Physeter catodon</i>	Physeteridae
2356e	66m	Dwarf Sperm Whale, <i>Kogia simus</i>	Physeteridae
2356f	92m	Sei Whale, <i>Balaenoptera borealis</i>	Balaenopteridae
2356		MS of 6 (Sc#2356a–f) (Whales)	
2371	SS 175m	Cape Hare, <i>Lepus capensis</i>	Leporidae
2372	SS 175m	Four-striped Grass Mouse, <i>Rhabdomys pumilio</i>	Muridae
2373	SS 175m	Ground Pangolin, <i>Manis temminckii</i>	Manidae
2374	SS 175m	Springbok, <i>Antidorcas marsupialis</i>	Bovidae
2375	SS 175m	African Wild Dog, <i>Lycaon pictus</i>	Canidae
2376	SS 175m	Hippopotamus, <i>Hippopotamus amphibius</i>	Hippopotamidae
2377	SS 175m	White Rhinoceros, <i>Ceratotherium simum</i>	Rhinocerotidae
2378	SS 175m	South African Fur Seal, <i>Arctocephalus pusillus</i>	Otariidae
2379	SS 175m	Blue Monkey, <i>Cercopithecus mitis</i>	Cercopithecidae
2380	SS 175m	Straw-colored Fruit Bat, <i>Eidolon helvum</i>	Pteropodidae
2381	SS 175m	Lion, <i>Panthera leo</i>	Felidae
2382	SS 175m	Leopard, <i>Panthera pardus</i>	Felidae
2383	SS 175m	African Bush Elephant, <i>Loxodonta africana</i>	Elephantidae
2384	SS 175m	Dugong, <i>Dugong dugon</i>	Dugongidae
2385	SS 175m	Southern Right Whale Dolphin, <i>Lissodelphis peronii</i>	Delphinidae
2386	SS 175m	Pygmy Killer Whale, <i>Feresa attenuata</i>	Delphinidae

MOZAMBIQUE**2011 December 30** (Events, People, and Anniversaries)

2482a	66m	Koala, <i>Phascolarctos cinereus</i> (denom UR, name LR)	Phascolarctidae
2482b	66m	Koala, <i>Phascolarctos cinereus</i> (denom UL, name UL)(trunk)	Phascolarctidae
2482c	66m	Koala, <i>Phascolarctos cinereus</i> (denom UL, name UR)	Phascolarctidae
2482d	66m	Koala, <i>Phascolarctos cinereus</i> (denom UR, name UL)	Phascolarctidae
2482e	66m	Koala, <i>Phascolarctos cinereus</i> (denom UL, name UL)(branch)	Phascolarctidae
2482f	66m	Koala, <i>Phascolarctos cinereus</i> (denom UL, name left)	Phascolarctidae
2482		MS of 6 (Sc#2482a–f) (Koalas)	
2483e	66m	Ocelot, <i>Leopardus pardalis</i>	Felidae
2483		MS of 6 (Sc#2483a–f) (Cat Breeds)	
2487a	66m	Fennec Fox, <i>Vulpes zerda</i>	Canidae
2487b	66m	South American Fur Seal, <i>Arctocephalus australis</i>	Otariidae
2487c	66m	Meerkat, <i>Suricata suricatta</i>	Herpestidae
2487d	66m	Giant Panda, <i>Ailuropoda melanoleuca</i>	Ursidae
2487e	66m	Walrus, <i>Odobenus rosmarus</i>	Odobenidae
2487f	66m	Lion, <i>Panthera leo</i>	Felidae
2487		MS of 6 (Sc#2487a–f) (DNA Genetics)	
2488a	66m	Bobcat, <i>Lynx rufus</i>	Felidae
2488b	66m	Giant Panda, <i>Ailuropoda melanoleuca</i>	Ursidae
2488c	66m	Tiger, <i>Panther tigris</i>	Felidae
2488d	66m	Mouflon, <i>Ovis orientalis</i>	Bovidae
2488e	66m	African Bush Elephant, <i>Loxodonta africana</i>	Elephantidae
2488f	66m	White Rhinoceros, <i>Ceratotherium simum</i>	Rhinocerotidae
2488		MS of 6 (Sc#2488a–f) (Endangered Animals)	
2511	SS 175m	Koala, <i>Phascolarctos cinereus</i>	Phascolarctidae
2516	SS 175m	Short-beaked Common Dolphin, <i>Delphinus delphis</i>	Delphinidae
		Striped Dolphin, <i>Stenella coeruleoalba</i>	Delphinidae

MOZAMBIQUE (continued) **2011 December 30** (Indonesia 2012 International Philatelic Exhibition)

2517a	66m	Koala, <i>Phascolarctos cinereus</i>	Phascolarctidae	
2517b	66m	Koala, <i>Phascolarctos cinereus</i>	Phascolarctidae	
2517c	66m	Koala, <i>Phascolarctos cinereus</i>	Phascolarctidae	
2517d	66m	Koala, <i>Phascolarctos cinereus</i>	Phascolarctidae	
2517e	66m	Koala, <i>Phascolarctos cinereus</i>	Phascolarctidae	
2517f	66m	Koala, <i>Phascolarctos cinereus</i>	Phascolarctidae	
2517		MS of 6 (Sc#2517a–f) (like Sc#2482 with expo emblem ovpt)		
2518a	66m	Bobcat, <i>Lynx rufus</i>	Felidae	
2518b	66m	Giant Panda, <i>Ailuropoda melanoleuca</i>	Ursidae	
2518c	66m	Tiger, <i>Panthera tigris</i>	Felidae	
2518d	66m	Mouflon, <i>Ovis orientalis</i>	Bovidae	
2518e	66m	African Bush Elephant, <i>Loxodonta africana</i>	Elephantidae	
2518f	66m	White Rhinoceros, <i>Ceratotherium simum</i>	Rhinocerotidae	
2518		MS of 6 (Sc#2518a–f) (like Sc#2488 with expo emblem ovpt)		

2012 April 30 (Extinct and Endangered Animals)

2585a	66m	Blue Buck, <i>Hippotragus leucophaeus</i>	Bovidae	
2585		MS of 4 (Sc#2585a–d) (Extinct African Animals)		
2586a	66m	Nendo Tube-nosed Fruit Bat, <i>Nyctimene santacrucis</i>	Pteropodidae	new
2586b	66m	Guam Flying Fox, <i>Pteropus tokudae</i>	Pteropodidae	new
2586c	66m	Large Palau Flying Fox, <i>Pteropus pilosus</i>	Pteropodidae	new
2586d	66m	New Zealand Greater Short-tailed Bat, <i>Mystacina robusta</i>	Mystacinidae	new
2586		MS of 4 (Sc#2586a–d) (Extinct Bats)		
2601a	16m	Pygmy Chimpanzee, <i>Pan paniscus</i> (one animal)	Hominidae	
2601b	16m	Pygmy Chimpanzee, <i>Pan paniscus</i> (two animals)	Hominidae	
2601c	16m	Pygmy Chimpanzee, <i>Pan paniscus</i> (adult & juvenile)	Hominidae	
2601d	66m	Chimpanzee, <i>Pan troglodytes</i>	Hominidae	
2601e	66m	Eastern Gorilla, <i>Gorilla beringei</i> (two gorillas)	Hominidae	
2601f	66m	Eastern Gorilla, <i>Gorilla beringei</i> (three gorillas)	Hominidae	
2601		MS of 6 (Sc#2601a–f) ((Endangered Primates)		
2602a	16m	Snow Leopard, <i>Uncia uncia</i>	Felidae	
2602b	16m	Flat-headed Cat, <i>Prionailurus planiceps</i>	Felidae	
2602c	16m	Tiger, <i>Panthera tigris</i>	Felidae	
2602d	66m	Iriomote Cat, <i>Prionailurus iriomotensis</i>	Felidae	
2602e	66m	Fishing Cat, <i>Prionailurus viverrinus</i>	Felidae	
2602f	66m	Lion, <i>Panthera leo</i>	Felidae	
2602		MS of 6 (Sc#2602a–f) (Endangered Cats)		
2603a	16m	Franciscana, <i>Pontoporia blainvillei</i>	Iniidae	
2603b	16m	Irrawaddy Dolphin, <i>Orcaella brevirostris</i>	Delphinidae	
2603d	16m	Hector's Dolphin, <i>Cephalorhynchus hectori</i>	Delphinidae	
2603d	66m	Common Bottlenose Dolphin, <i>Tursiops truncatus</i>	Delphinidae	
2603e	66m	Yangtze River Dolphin, <i>Lipotes vexillifer</i>	Iniidae	
2603f	66m	Ganges River Dolphin, <i>Platanista gangetica</i>	Platanistidae	
2603		MS of 6 (Sc#2603a–f) (Endangered Dolphins)		
2611a	16m	Bengal Fox, <i>Vulpes bengalensis</i>	Canidae	new
2611b	16m	Puma, <i>Puma concolor</i>	Felidae	
2611c	16m	Grey Wolf, <i>Canis lupus</i>	Canidae	
2611d	66m	Tiger, <i>Panthera tigris</i>	Felidae	
2611e	66m	Ocelot, <i>Leopardus pardalis</i>	Felidae	
2611f	66m	African Wild Dog, <i>Lycaon pictus</i>	Canidae	
2611		MS of 6 (Sc#2611a–f) (Endangered Carnivores)		

MOZAMBIQUE (continued)

2612a	16m	Australian Sea Lion, <i>Neophoca cinerea</i>	Phocidae	new
2612b	16m	Vaquita, <i>Phocoena sinus</i>	Phocoenidae	
2612d	66m	Sea Otter, <i>Enhydra lutris</i>	Mustelidae	
2612e	66m	Humpback Whale, <i>Megaptera novaeangliae</i>	Balaenopteridae	
2612		MS of 6 (Sc#2612a–f) (Endangered Marine Life)		
2613a	16m	Falkland Island Wolf, <i>Dusicyon australis</i>	Canidae	
2613b	16m	Lesser Bilby, <i>Macrotis leucura</i>	Peramelidae	new
2613c	16m	Quagga, <i>Equus quagga</i>	Equidae	
2613d	66m	Crescent Nail-tailed Wallaby, <i>Onychogalea lunata</i>	Macropodidae	new
2613e	66m	Thylacine, <i>Thylacinus cynocephalus</i>	Thylacinidae	
2613		MS of 6 (Sc#2613a–f) (Extinct Animals)		
2615	SS 175m	Eastern Gorilla, <i>Gorilla beringei</i>	Hominidae	
2616	SS 175m	Spanish Lynx, <i>Lynx pardinus</i>	Felidae	
2617	SS 175m	Hector's Dolphin, <i>Cephalorhynchus hectori</i>	Delphinidae	
2626	SS 175m	Hawaiian Monk Seal, <i>Monachus schauinslandi</i>	Phocidae	
2627	SS 175m	Lion, <i>Panthera leo</i>	Felidae	
2628a	16m	Tiger, <i>Panthera tigris</i>	Felidae	
2628b	16m	Clouded Leopard, <i>Neofelis nebulosa</i>	Felidae	
2628c	16m	Arabian Gazelle, <i>Gazella arabica</i>	Bovidae	
2628e	16m	Grey Wolf, <i>Canis lupus</i>	Canidae	
2628f	16m	Schomburgk's Deer, <i>Cervus schomburgki</i>	Cervidae	
2628g	92m	Sumatran Rhinoceros, <i>Dicerorhinus sumatrensis</i>	Rhinocerotidae	
2628h	92m	Tiger, <i>Panthera tigris</i>	Felidae	
2628		MS of 8 (Sc#2628a–h) (Extinct Asian Animals)		
2629a	16m	Bulldog Rat, <i>Rattus nativitatis</i>	Muridae	new
2629b	16m	Crescent Nail-tailed Wallaby, <i>Onychogalea lunata</i>	Macropodidae	new
2629c	16m	Desert Rat Kangaroo, <i>Caloprymnus campestris</i>	Potoroidae	new
2629g	92m	Lesser Bilby, <i>Macrotis leucura</i>	Peramelidae	new
2629h	92m	New Zealand Greater Short-tailed Bat, <i>Mystacina robusta</i>	Mystacinidae	new
2629		MS of 8 (Sc#2629a–h) (Extinct Animals of Oceania)		
2630a	16m	Gould's Mouse, <i>Pseudomys gouldii</i>	Muridae	new
2630b	16m	Pemberton's Deer Mouse, <i>Peromyscus pembertoni</i>	Muridae	new
2630c	16m	Nelson's Rice Rat, <i>Oryzomys nelsoni</i>	Muridae	new
2630d	16m	Swan Island Hutia, <i>Geocapromys thoracatus</i>	Capromyidae	new
2630e	16m	Lesser Stick-nest Rat, <i>Leporillus apicalis</i>	Muridae	new
2630f	16m	Bavarian Pine Vole, <i>Microtus bavaricus</i>	Muridae	new
2630g	92m	Big-eared Hopping Mouse, <i>Notomys macrotis</i>	Muridae	new
2630h	92m	Saint Lucia Giant Rice Rat, <i>Megalomys luciae</i>	Muridae	new
2630		MS of 8 (Sc#2630a–h) (Extinct Rodents)		
2631a	16m	Kulan, <i>Equus hemionus</i>	Equidae	
2631b	16m	Cuvier's Gazelle, <i>Gazella cuvieri</i>	Bovidae	
2631c	16m	Chilean Guemal, <i>Hippocamelus bisulcus</i>	Cervidae	
2631d	16m	Wild Ass, <i>Equus asinus</i>	Equidae	
2631e	16m	Nile Lechwe, <i>Kobus megaceros</i>	Bovidae	
2631f	16m	Addax, <i>Addax nasomaculatus</i>	Bovidae	
2631g	92m	Nilgiri Tahr, <i>Hemitragus hylocrius</i>	Bovidae	
2631h	92m	Anoa, <i>Bubalus depressicornis</i>	Bovidae	
2631		MS of 8 (Sc#2631a–h) (Endangered Ungulates)		

MOZAMBIQUE (continued)

2636	SS 175m	Tiger, <i>Panthera tigris</i>	Felidae	
2637	SS 175m	Thylacine, <i>Thylacinus cynocephalus</i>	Thylacinidae	
2638	SS 175m	Short-tailed Hopping Mouse, <i>Notomys amplus</i>	Muridae	new
		MacLear's Rat, <i>Rattus macleari</i>	Muridae	new
2639	SS 175m	Dama Gazelle, <i>Nanger dama</i>	Bovidae	

2012 October 30 (Events, Anniversaries, and People)

2724a	16m	Lion, <i>Panthera leo</i>	Felidae	
2724c	16m	Thorold's Deer, <i>Cervus albirostris</i>	Cervidae	new
2724d	66m	Brown Bear, <i>Ursus arctos</i>	Ursidae	
2724e	66m	South American Tapir, <i>Tapirus terrestris</i>	Tapiridae	
2724		MS of 6 (Sc#2724a–f) (Riga Zoo Centennial)		
2730a	16m	Eastern Gorilla, <i>Gorilla beringei</i>	Hominidae	
2730b	16m	Eastern Gorilla, <i>Gorilla beringei</i> (Fossey & gorilla head)	Hominidae	
2730c	16m	Eastern Gorilla, <i>Gorilla beringei</i> (Fossey with book)	Hominidae	
2730d	66m	Eastern Gorilla, <i>Gorilla beringei</i> (Fossey & two gorillas)	Hominidae	
2730e	66m	Eastern Gorilla, <i>Gorilla beringei</i> (Fossey & one gorilla)	Hominidae	
2730f	66m	Eastern Gorilla, <i>Gorilla beringei</i>	Hominidae	
2730		MS of 6 (Sc#2730a–f) (Diane Fossey, 1932–85)		
2754	SS 175m	Ring-tailed Lemur, <i>Lemur catta</i>	Lemuridae	
2760	SS 175m	Eastern Gorilla, <i>Gorilla beringei</i>	Hominidae	

ROMANIA**2012 December 7** (Young Animals)

5402	4.50L	Brown Bear, <i>Ursus arctos</i>	Ursidae	
5403	5L	Western Roe Deer, <i>Capreolus capreolus</i>	Cervidae	
5404	9.10L	Red Fox, <i>Vulpes vulpes</i>	Canidae	
5405	14.50L	Grey Wolf, <i>Canis lupus</i>	Canidae	

ST. THOMAS & PRINCE ISLANDS 2008 February 4 (Vivian Fuchs, 1908–99)

1790a	5000d	Grey Wolf, <i>Canis lupus</i>	Canidae	
1790d	70000d	Polar Bear, <i>Ursus maritimus</i>	Ursidae	
1790		MS of 4 (Sc#1790a–d)		

2008 March 28

1847a	5000d	Giant Panda, <i>Ailuropoda melanoleuca</i> (with tree)	Ursidae	
1847b	5000d	Giant Panda, <i>Ailuropoda melanoleuca</i> (with snowflakes)	Ursidae	
1847c	5000d	Giant Panda, <i>Ailuropoda melanoleuca</i> (with stars)	Ursidae	
1847d	70000d	Giant Panda, <i>Ailuropoda melanoleuca</i>	Ursidae	
1847		MS of 4 (Sc#1847a–d) (Pandas & Scouting emblem)		
1848a	5000d	African Bush Elephant, <i>Loxodonta africana</i>	Elephantidae	
		Grévy's Zebra, <i>Equus grevyi</i>	Equidae	
1848b	5000d	African Bush Elephant, <i>Loxodonta africana</i>	Elephantidae	
1848c	5000d	African Bush Elephant, <i>Loxodonta africana</i>	Elephantidae	
		Grant's Gazelle, <i>Gazella granti</i>	Bovidae	
1848d	70000d	African Bush Elephant, <i>Loxodonta africana</i>	Elephantidae	
		Giraffe, <i>Giraffa camelopardalis</i>	Giraffidae	
1848		MS of 4 (Sc#1848a–d) (African Elephants)		
1850a	5000d	Tiger, <i>Panthera tigris</i>	Felidae	
1850c	5000d	Dromedary, <i>Camelus dromedarius</i>	Camelidae	
1850d	70000d	Red Panda, <i>Ailurus fulgens</i>	Ailuridae	
1850		MS of 4 (Sc#1850a–d) (Waterfalls & Wildlife)		

ST. THOMAS & PRINCE ISLANDS 2008 July 17 (Animals on Banknotes of the World)

1871c	30000d	Moose (Elk), <i>Alces alces</i>	Cervidae
1871d	30000d	African Buffalo, <i>Syncerus caffer</i>	Bovidae
1871		MS of 4 (Sc#1871a–d)	

2008 September 14

1901a	20000d	Short-beaked Common Dolphin, <i>Delphinus delphis</i>	Delphinidae
1901b	20000d	Risso's Dolphin, <i>Grampus griseus</i>	Delphinidae
1901c	20000d	Ganges River Dolphin, <i>Platanista gangetica</i>	Platanistidae
1901d	40000d	Commerson's Dolphin, <i>Cephalorhynchus commersonii</i>	Delphinidae
1901		MS of 4 (Sc#1901a–d) (International Dolphins Year)	
	Margin	LR: Bottlenose Dolphin, <i>Tursiops truncatus</i>	Delphinidae
		UR: Pacific White-sided Dolphin, <i>Lagenorhynchus obliquidens</i>	Delphinidae
1907a	25000d	Koala, <i>Phascolarctos cinereus</i>	Phascolarctidae
1907b	25000d	Western Gorilla, <i>Gorilla gorilla</i>	Hominidae
1907c	25000d	Red Panda, <i>Ailurus fulgens</i>	Ailuridae
1907d	25000d	Giant Panda, <i>Ailuropoda melanoleuca</i>	Ursidae
1907		MS of 4 (Sc#1907a–d) (Sir Peter Scott, 1908–89)	
	Margin	LR: Leopard, <i>Panthera pardus</i>	Felidae
1909 SS	100000d	Bottlenose Dolphin, <i>Tursiops truncatus</i>	Delphinidae
	Margin	R: Pan Tropical Striped Dolphin, <i>Stenella attenuata</i>	Delphinidae
		LL: Atlantic Humpbacked Dolphin, <i>Sousa teuszii</i>	Delphinidae

2008 November 3 (Animals and Dams)

1927a	25000d	Eurasian Lynx, <i>Lynx lynx</i>	Felidae
1927b	25000d	Ibex, <i>Capra ibex</i>	Bovidae
1927c	25000d	Red Panda, <i>Ailurus fulgens</i>	Ailuridae
1927d	25000d	Eastern Grey Squirrel, <i>Sciurus carolinensis</i>	Sciuridae
1927		MS of 4 (Sc#1927a–d)	

2009 March 31 (Primates and Fruits)

1973a	25000d	South American Squirrel Monkey, <i>Saimiri sciureus</i>	Cebidae
1973b	25000d	Cotton-top Tamarin, <i>Saguinus oedipus</i>	Callitrichidae
1973c	25000d	White-tufted-ear Marmoset, <i>Callithrix jacchus</i>	Callitrichidae
1973d	25000d	Golden-headed Lion Tamarin, <i>Leontopithecus chrysomelas</i>	Callitrichidae
1973		MS of 4 (Sc#1973a–d)	
1978 SS	100000d	Potto, <i>Perodicticus potto</i>	Loridae
		Spectral Tarsier, <i>Tarsius tarsier</i>	Tarsiidae
	Margin	LL: Pig-tailed Langur, <i>Nasalis concolor</i>	Cercopithecidae
		LL: Allen's Swamp Monkey, <i>Allenopithecus nigroviridis</i>	Cercopithecidae
		Bot: Chimpanzee, <i>Pan troglodytes</i>	Hominidae
		LR: Pygmy Chimpanzee, <i>Pan paniscus</i>	Hominidae
		UR: Bornean Orangutan, <i>Pongo pygmaeus</i>	Hominidae
1979 SS	100000d	Lion, <i>Panthera leo</i>	Felidae
	Margin	LL/LR: Leopard, <i>Panthera pardus</i>	Felidae
		UR: Gemsbok, <i>Oryx gazella</i>	Bovidae
		UR: Lion, <i>Panthera leo</i>	Felidae
1980 SS	100000d	Cheetah, <i>Acinonyx jubatus</i>	Felidae
	Margin	Caracal, <i>Caracal caracal</i>	Felidae
1981 SS	100000d	Jungle Cat, <i>Felis chaus</i>	Felidae
	Margin	UR/LR: Wild Cat, <i>Felis silvestris</i>	Felidae
		LL: Jungle Cat, <i>Felis chaus</i>	Felidae

ST. THOMAS & PRINCE ISLANDS 2009 May 29

2099a	13000d	Grey Wolf, <i>Canis lupus</i>	Canidae
2099		MS of 4 (Sc#2099a–d) (Native Americans & Wildlife)	
2100a	13000d	Grévy's Zebra, <i>Equus grevyi</i>	Equidae
2100		MS of 4 (Sc#2100a–d) (Intl. Year of Science)	
2109b	25000d	Bottlenose Dolphin, <i>Tursiops truncatus</i>	Delphinidae
2109		MS of 4 (Sc#2109a–d) (Intl. Year of Science)	
2122 SS	100000d	LL: American Bison, <i>Bison bison</i>	Bovidae

2009 July 30 (African Animals & Steam Locomotives)

2164b	30000d	Burchell's Zebra, <i>Equus quagga</i>	Equidae
2164c	30000d	African Bush Elephant, <i>Loxodonta africana</i>	Elephantidae
2164d	30000d	Lion, <i>Panthera leo</i>	Felidae
2164		MS of 4 (Sc#2164a–d)	
	Margin	UR: Hippopotamus, <i>Hippopotamus amphibius</i>	Hippopotamidae
		UR: Chimpanzee, <i>Pan troglodytes</i>	Hominidae
2174 SS	100000d	Giraffe, <i>Giraffa camelopardalis</i>	Giraffidae
	Margin	LL: Lion, <i>Panthera leo</i>	Felidae
		Top: Dromedary, <i>Camelus dromedarius</i>	Camelidae

2009 October 29 (Cetaceans)

2182a	10000d	Bottlenose Dolphin, <i>Tursiops truncatus</i>	Delphinidae
		Bowhead Whale, <i>Balaena mysticetus</i>	Balaenidae
2182b	10000d	Pacific White-sided Dolphin, <i>Lagenorhynchus obliquidens</i>	Delphinidae
		Southern Right Whale, <i>Eubalaena australis</i>	Balaenidae
2182c	10000d	Long-finned Pilot Whale, <i>Globicephala melas</i>	Delphinidae
		Sperm Whale, <i>Physeter catodon</i>	Physeteridae
2182d	20000d	Killer Whale, <i>Orcinus orca</i>	Delphinidae
		Risso's Dolphin, <i>Stenella frontalis</i>	Delphinidae
2182e	20000d	Killer Whale, <i>Grampus griseus</i>	Delphinidae
		Humpback Whale, <i>Megaptera novaeangliae</i>	Balaenopteridae
2182		MS of 5 (Sc#2182a–e)	
	Margin	Top: Common Short-beaked Dolphin, <i>Delphinus delphis</i>	Delphinidae
		Top: Blue Whale, <i>Balaenoptera musculus</i>	Balaenopteridae
2192 SS	70000d	Harbor Porpoise, <i>Phocaena phocaena</i>	Phocoenidae
		Killer Whale, <i>Orcinus orca</i>	Delphinidae
	Margin	UR: Bottlenose Dolphin, <i>Tursiops truncatus</i>	Delphinidae
		LL: Bowhead Whale, <i>Balaena mysticetus</i>	Balaenidae
		LR: Common Short-beaked Dolphin, <i>Delphinus delphis</i>	Delphinidae

SPAIN**2013 June 3 (Endangered Marine Life)**

3912a	37c	North Atlantic Right Whale, <i>Eubalaena glacialis</i>	Balaenidae
3912c	37c	Mediterranean Monk Seal, <i>Monachus monachus</i>	Phocidae
3912		MS of 4 (Sc#3912a–d)	

TONGA**2013 May 10 (Australia 2013 World Stamp Expo, Melbourne)**

1201a	3pa	Koala, <i>Phascolarctos cinereus</i>	Phascolarctidae
1201c	3pa	Red Kangaroo, <i>Macropus rufus</i>	Macropodidae
1201		SS of 3 (Sc#1201a–c)	

UZBEKISTAN**2012 December 28 (Tashkent Zoo Animals)**

715	800s	Patagonian Mara, <i>Dolichotis patagonum</i>	Caviidae	new
717	SS 1200s	Asiatic Elephant, <i>Elephas maximus</i>	Elephantidae	



ORNITHOLOGY

Editor

Glenn G. Mertz, BU1455



New Issues

Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
AUSTRALIA				
2013 April 2				
A*				
Bush Babies Part 2 (Sc#3889–93) featuring five animals, but only one stamp features a bird: Also printed in s/a booklet stamps. Designer: Simone Sakinofsky. Offset in sheets of 50 by McKellar Design.				
3889	\$1.70	Laughing Kookaburra, <i>Dacelo novaeguineae</i>	Alcedinidae	
3894	\$1.70	Same bird, s/a bklt stamp		
3894a		Bklt pane of 5 (Sc#3894)		
AUSTRIA				
2013 June 7				
A*				
A single stamp celebrating the Centennial of the Austrian Nature Protection League. Designer: Teresa Limberger. Offset by Austrian Government Printing Office.				
2450	90c	Common Kingfisher, <i>Alcedo atthis</i>	Alcedinidae	
BELARUS				
2013 April 10				
C*				
A SS with a single stamp for Vacations in the Countryside. Designer: Yekaterina Priemko. Offset by Bobruisk.				
853	15000r	Common Crane, <i>Grus grus</i>	Gruidae	
2013 March 12				
A*				
A single non-denominated “P” stamp for Bird of the Year. Designer: Alexander Mityanin. Offset by Bobruisk in sheets of seven stamps and a bottom right label. It is also a Birdlife International designated issue, with the Birdlife emblem in the top right corner of each stamp.				
851	(5800r)	Eurasian Hoopoe, <i>Upupa epops</i>	Upupidae	
2013 January 21				
A*				
A SS with two stamps (Sc#846–47) for the Red Book of flora and fauna of the Republic of Belarus, with a “P” stamp for the bird stamp. Designers: Alexander Mityanin and Yauheniya Bladonik. Offset by Bobruisk.				
847	(5800r)	European Roller, <i>Coracias garrulus</i>	Coraciidae	
BELGIUM				
2013 January 21				
A*				
Two non-denominated definitives, both birds. One stamp for Association and one for Registered Mail. Designer: Andre Buzin. Offset by State Printer.				
2618	(40c)	Black Grouse, <i>Tetrao tetrix</i>	Phasianidae	
F3	(€5.03)	Arctic Tern, <i>Sterna paradisaea</i>	Laridae	
CAPE VERDE				
2012				
A*				
Set of six stamps (Sc#984–89) and a SS. No “New Issues” article in <i>Linn’s Stamp News</i> , but the designer is Domingos Luisa. Flora and fauna of Santo Antão Protected Area, but only two stamps feature birds.				
984	10e	Cape Verde Buzzard, <i>Buteo bannermani</i>	Accipitridae	
985	20e	Fea’s Petrel, <i>Pterodroma feae</i>	Procellariidae	

CAPE VERDE (continued) 2011

Set of six stamps (Sc#959–64) and a SS. Three of the stamps feature birds. No “New Issues” article in *Linn’s Stamp News* for designer, printing method, or printer information. The stamps themselves list the designer as Domingos Luisa. The stamps are for flora and fauna of the Cha Das Caldeiras protected area.

959	\$5	Gray-headed Kingfisher, <i>Halcyon leucocephala</i>	Alcedinidae
961	\$20	Cape Verde Swamp-Warbler, <i>Acrocephalus brevipennis</i>	Acrocephalidae
963	\$60	Fea’s Petrel, <i>Pterodroma feae</i>	Procellariidae
965	SS \$150	Features the Gray-headed Kingfisher and the Cape Verde Swamp-Warbler	

CHINA (Taiwan) 2013 March 20 B*

Five \$10 stamps (Sc#4095–99) and a SS (Sc#4100) of embroidery of the Qing Dynasty, showing bird and flora motifs. Many of the birds are unidentified. No designer information. Offset by Cartor.

4095	\$10	Red-crowned Crane, <i>Grus japonensis</i>	Gruidae
4096	\$10	Crested Myna, <i>Acridotheres cristatellus</i>	Sturnidae

2012 November 22 B*

Sheet of three se-tenant stamps (Sc#4077a–c) and a SS (Sc#4078) for Ancient Chinese Paintings. The se-tenant strip of three stamps has details with birds from Three Friends and A Hundred Birds by Pien Wen-chin. The SS designer is Delta Design. Offset by Cartor.

4077a	\$5	Azure-winged Magpie, <i>Cyanopica cyanus</i>	Corvidae
		Japanese Waxwing, <i>Bombycilla japonica</i>	Bombycillidae
4077b	\$10	Yellow-billed Grosbeak, <i>Eophona migratoria</i>	Fringillidae
		Great Tit, <i>Parus minor</i>	Paridae
		Red-Billed Leiothrix, <i>Leiothrix lutea</i>	Timaliidae
		Scarlet Minivet, <i>Pericrocotus flammeus</i>	Campephagidae
		Light-vented Bulbul, <i>Pycnonotus sinensis</i>	Pycnonotidae
4077c	\$12	Japanese White-eye, <i>Zosterops japonicus</i>	Zosteropidae
		Azure-winged Magpie, <i>Cyanopica cyanus</i>	Corvidae
		Eurasian Blackbird, <i>Turdus merula</i>	Turdidae
		Common Redpoll, <i>Acanthis flammea</i>	Fringillidae
4078	SS \$70	Eurasian Blackbird, <i>Turdus merula</i>	Turdidae
		Scarlet Minivet, <i>Pericrocotus flammeus</i>	Campephagidae
		Black-throated Laughingthrush, <i>Garrulax chinensis</i>	Leiothrichidae
		Azure-winged Magpie, <i>Cyanopica cyanus</i>	Corvidae
		Japanese Waxwing, <i>Bombycilla japonica</i>	Bombycillidae
		White-throated Rock-Thrush, <i>Monticola gularis</i>	Turdidae
		Oriental Magpie-Robin, <i>Copsychus saularis</i>	Muscicapidae
		Crested Myna, <i>Acridotheres cristatellus</i>	Sturnidae
		Rufous-tailed Rock-Thrush, <i>Monticola saxatilis</i>	Turdidae
		Eurasian Tree Sparrow, <i>Passer montanus</i>	Passeridae

ESTONIA 2013 March 7 A*

Single stamp for Bird of the Year. Designer: Vladimir Taiger. Offset by Vaba Maa.

725	45c	Gray Partridge, <i>Perdix perdix</i>	Phasianidae
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FINLAND (Åland Islands) 2013 April 5 A*

A booklet of four non-denominated stamps of loons and grebes issued for World Wildlife Fund for mail to European countries (each stamp includes the WWF Panda emblem). Designer: Bo Lundwall. Offset in booklets of eight stamps by Fosten Sverige.

340a	€1	Arctic Loon, <i>Gavia arctica</i>	Gaviidae
340b	€1	Red-throated Loon, <i>Gavia stellata</i>	Gaviidae
340c	€1	Horned Grebe, <i>Podiceps auritus</i>	Podicipedidae
340d	€1	Great Crested Grebe, <i>Podiceps cristatus</i>	Podicipedidae
340e		Bklt pane of 8 (2ea Sc#340a–d)	

FRENCH SOUTHERN & ANTARCTIC TERR. 2013 May 17 C*

Single stamp on a large SS with penguins and a map. No “New Issues” article has yet appeared in *Linn’s Stamp News*, so no designer, printing method, or printer information at this time.

489	€5	Adelie Penguin, <i>Pygoscelis adeliae</i>	Spheniscidae
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2013 January 1 B*

Sheet of six stamps (Sc#480a–f) of Helicopters of the Polar Region, with stamps featuring penguins. Designer and engraver: Pierre Albuissou. Intaglio by Philapost.

480a	€1	Adelie Penguin, <i>Pygoscelis adeliae</i>	Spheniscidae
480c	€1	King Penguin, <i>Aptenodytes patagonicus</i>	Spheniscidae

2013 January 1 A*

Pane of four stamps of different views of ducks. Designer and engraver: Claude Andreotto. Intaglio and Offset by Philapost.

479a	20c	Eaton’s Pintail, <i>Anas eatoni</i> (duck in water)	Anatidae	Vol.62(2)
479b	60c	Same bird, heads of two ducks		
479c	€1	Same bird, duck and eggs		
479d	€1.45	Same bird, head of ducks, ducks in flight		

2013 January 1 B*

Single wide stamp for Mawson’s Huts and a picture of the explorer, Douglas Mawson, and two penguins. Designer: Claude Andreotto. Intaglio by Philapost.

476	€1.45	Adelie Penguin, <i>Pygoscelis adeliae</i>	Spheniscidae
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2013 January 1 C*

Single stamp for Charles Petijean, a polar helicopter pilot. Designer and engraver: Yves Beaujard. Intaglio by Philapost.

473	65c	Adelie Penguin, <i>Pygoscelis adeliae</i>	Spheniscidae
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2012 November 2 B*

SS with a single wide stamp of bridges with penguins. Designer and engraver: Aurelie Baras. Intaglio and Offset by Philapost.

470	€2	Adelie Penguin, <i>Pygoscelis adeliae</i>	Spheniscidae
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2012 June 9 A*

Set of five se-tenant stamps (Sc#468a–e) for the French National Center for Space Studies in the French Southern and Antarctic Territories and polar region. Only one stamp features birds. No designer information provided, but a name on the stamp border of C. Poupon could be the designer. Gravure in sheets of five stamps and five labels by Philapost.

468b	60c	King Penguin, <i>Aptenodytes patagonicus</i>	Spheniscidae
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FIJI **2012 July 11** **A***

Pane of eight \$2 stamps with four designs for World Wildlife Fund. Designer: Sue Wickinson. Offset by Southern Colour Print.

1286a	\$2	Collared Lory, <i>Phigys solitarius</i> (two birds)	Psittacidae
1286b	\$2	Same bird, single bird facing left	
1286c	\$2	Same bird, single bird eating fruit	
1286d	\$2	Same bird, head only	

FRENCH POLYNESIA **2013 April 26** **A***

Sheet of three stamps (Sc#1096–98) for fauna and flora of French Polynesia, but only one stamp features a bird. Designer: J. L. Saquet. Offset by Philapost.

1098	190fr	Chestnut-breasted Munia, <i>Lonchura castaneothorax</i>	Estrildidae
1098a		SS of 3 (Sc#1096–98)	

INDONESIA **2013 May 1** **B***

Three stamps (Sc#2346a–c) for the Liberation of West Irian 50th Anniversary. One stamp features a bird. No designer information. Offset by Perum Peruri.

2346c	2500r	Lesser Bird-of-Paradise, <i>Paradisaea minor</i>	Paradisaeidae
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IRAQ **2012 December 13** **A***

Set of four stamps and an imperforate SS, all of falcons. Designer: Ali Sherchi. Offset by Green Glory.

1891	250d	Gyrfalcon, <i>Falco rusticolus</i>	Falconidae
1892	500d	Lanner Falcon, <i>Falco biarmicus</i>	Falconidae
1893	750d	Saker Falcon, <i>Falco cherrug</i>	Falconidae
1894	1000d	Peregrine Falcon, <i>Falco peregrinus</i>	Falconidae
1895	SS 1000d	Peregrine Falcon, <i>Falco peregrinus</i>	Falconidae

IRELAND **2013 April 2** **A***

Four stamps of wildlife (Sc#1991–94) of which two are of birds. No listing of this issue in *Linn's Stamp News* under "New Issues," so no listing of designer or printing method.

1991	60c	Golden Eagle, <i>Aquila chrysaetos</i> (s/a coil)	Accipitridae
1993	60c	European Goldfinch, <i>Spinus carduelis</i> (s/a bklt)	Fringillidae

ISRAEL **2013 April 2** **A***

Three stamps with tabs, all of vultures. Designers: Zvika Roitman and Tuvia Kurtz. Offset by Cartor.

1969	3s	Lappet-faced Vulture, <i>Torgos tracheliotus</i>	Accipitridae
		Egyptian Vulture, <i>Neophron percnopterus</i>	Accipitridae
1970	3s	Lammergeier, <i>Gypaetus barbatus</i>	Accipitridae
1971	3s	Eurasian Griffon, <i>Gyps fulvus</i>	Accipitridae

2012 December 12 **A***

Pane of three se-tenant stamps (Sc#1960a–c) for Wildlife Conservation, showing hands holding animals. Only one stamp features a bird. Designers: Igal Gabai and Tuvia Kurtz. Offset by Cartor;

1960c	3s	Imperial Eagle, <i>Aquila heliaca</i>	Accipitridae
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JAPAN **2013 May 23** **A***

Five stamps (Sc#3544–48) for rare flora and fauna (Part 3), with one stamp featuring a bird. Designer: Hoshiyama Ayaka. Gravure, no printer information.

3545	80¥	Ryukyu Robin, <i>Larvivola komadori</i>	Muscicapidae
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JAPAN (continued) 2013 April 16 A*

The seventeenth set of stamps of travel scenes in Japan showing sites in Tateyama and Kurobe areas of Toyama (Sc#3531a–j) in a se-tenant format of ten stamps, with only stamp featuring a bird. No designer information. Offset by Cartor.

3531a 80¥ Rock Ptarmigan, *Lagopus muta* Phasianidae

LITHUANIA 2013 April 6 A*

A single stamp for National Bird. Designers: Roberta Masidlauskyte and Rolandas Grigaravicius. Offset, no printer information provided.

996 7L White Stork, *Ciconia ciconia* Ciconiidae

MONACO 2013 June 5 A*

A single stamp for SEPAC. Designer: Giuseppe Mazza. Offset by Philapost.

2727 80c Yellow-legged Gull, *Larus michahellis* Laridae

NEW ZEALAND 2013 March 19 A*

Sheet of 20 se-tenant stamps (Sc#2474a–t) for Classic Travel Posters, but only one stamp features a bird. No “New Issues” article for this issue at time of writing.

24741 70c Kea, *Nestor notabilis* Psittacidae

2012 July 4 C*

Pane of 20 se-tenant stamps (Sc#2415a–t) for Part 2 of Tiki Tour of the South Island, but only two stamps feature a bird. Designers: Evan Purdie and Geoff Francis. Offset by Southern Colour Print.

2415o 70p Kea, *Nestor notabilis* Psittacidae
 2415t 70p Royal Albatross, *Diomedea epomophora* Diomedeidae
 Unidentified penguins Spheniscidae

POLAND 2013 April 12 A*

SS of a Polish bird. Designer: Marzanna Dabrowska. Offset, but no printing method or printer name.

4074 4.55z Common Kingfisher, *Alcedo atthis* Alcedinidae

PORTUGAL 2013 March 23 A*

Four non-denominated stamps for falconry and falconry equipment. Designer: Francisco Galamba. Offset by Imprensa Nacional Cas De Moeda.

3492 (32c) Peregrine Falcon, *Falco peregrinus* Falconidae
 3493 (47c) Northern Goshawk, *Accipiter gentilis* Accipitridae
 3494 (68c) Eurasian Sparrowhawk, *Accipiter nisus* Accipitridae
 3495 (80c) Golden Eagle, *Aquila chrysaetos* Accipitridae

SURINAME 2011 April 4 B*

Twelve se-tenant stamps (Sc#1419a–l) for the 25th Anniversary of International Paper Money show, but only one of the banknotes features a bird. Designer: Studio Labranda. Offset by Enschede.

1419d 250s Tooth-billed Pigeon, *Didunculus strigirostris* Columbidae

TONGA

2013 June 6

A*

Part 2 of bird stamp definitives. Printed with and without white frames. Designer: Alison Dittko. Offset in sheets of 20 and miniature sheets of 12, with the stamps se-tenant.

1203	10c	Collared Kingfisher, <i>Todiramphus chloris</i> (Cap: <i>Halcyon</i>)	Alcedinidae
1204	20c	Polynesian Starling, <i>Aplonis tabuensis</i>	Sturnidae
1205	30c	Blue-crowned Lorikeet, <i>Vini australis</i>	Psittacidae
1206	40c	Great Frigatebird, <i>Fregata minor</i>	Fregatidae
1207	50c	Red-footed Booby, <i>Sula sula</i>	Sulidae
1208	80c	Red-tailed Tropicbird, <i>Phaethon rubricauda</i>	Phaethontidae
1209	90c	Black Noddy, <i>Anous minutus</i>	Laridae
1210	1.10pa	Polynesian Triller, <i>Lalage maculosa</i>	Campephagidae
1211	1.20pa	Spotless Crake, <i>Porzana tabuensis</i>	Rallidae
1212	2pa	Wattled Honeyeater, <i>Foulehaio carunculatus</i>	Meliphagidae
1213	12.50pa	Red Shining-Parrot, <i>Prosopiea tabuensis</i>	Psittacidae
1214	20pa	Many-colored Fruit-Dove, <i>Ptilinopus perousii</i>	Columbidae
1215a-l		The same birds as listed above, but without the white borders	

SOMETHING FOR EVERYONE

On 4 September 2013, the Czech Post issued a miniature sheet of four with four labels to promote Nature Protection of the Karlštejn National Nature Reserve. Unlike similar sheets from other authorities, this one clearly notes the identifications of each species depicted except for one. Your challenge is to find and identify it.

The sheet is 177×121mm with the perf 12 stamps measuring 50×40mm and 23×40mm. Graphic designers were Libuše and Jaromír Knotek and the engraver was Martin Srb. Printing by Post Printing House.

The Karlštejn National Nature Reserve (16km²) was established in

1955. It covers the area between the town of Beroun and the villages of Vráž, Mořina, Karlštejn, and Srbsko, within the Bohemian Karst Protected Landscape Area (128km²) established in 1972. The geology consists of limestone rocks with jagged karst canyons, ravines, and numerous caves, some of which are archeologically valuable.

The area was first populated as early as 40,000 years ago. The thermophilic plants growing in the reserve are typical of the Mediterranean region. Some local species, such as the pyramidal orchid (*Anacamptis pyramidalis*), the Austrian dragonhead (*Dracocephalum austriacum*), and rare orchid species, are unique and cannot be found anywhere else in Bohemia. Local animals include numerous rare species, including more than 200 species of carabid beetles; two amphibians, the great crested newt (*Triturus cristatus*) and the less frequent Alpine newt (*Triturus alpestris*); and the endangered wallcreeper (*Tichodroma muraria*) as a representative of birds.



CLEMENTS 2013 UPDATE**Charles E. Braun, BU1364****Taxonomic Update**

Cornell University released the Clements 2013 taxonomic update in August. Changes ranged from a reshuffling of families to minor typographic corrections. The table below shows the revised order of families. Three families are new (Sarothruridae, Pluvianidae, and Paradoxornithidae). One family (Prionopidae) is lumped with Vangidae.

No.	Family	Members	No.	Family	Members
	STRUTHIONIFORMES			PELECANIFORMES	
1	Struthionidae	Ostrich	28	Pelecanidae	Pelicans
2	Rheidae	Rheas	29	Balaenicipitidae	Shoebill
3	Casuariidae	Cassowaries	30	Scopidae	Hamerkop
4	Dromaiidae	Emu	31	Ardeidae	Hérons, Egrets, and Bitterns
5	Apterygidae	Kiwis	32	Threskiornithidae	Ibises and Spoonbills
	TINAMIFORMES			ACCIPITRIFORMES	
6	Tinamidae	Tinamous	33	Cathartidae	New World Vultures
	ANSERIFORMES		34	Sagittariidae	Secretary-bird
7	Anhimidae	Screamers	35	Pandionidae	Osprey
8	Anatidae	Ducks, Geese, and Waterfowl	36	Accipitridae	Hawks, Eagles, and Kites
	GALLIFORMES			OTIDIFORMES	
9	Megapodiidae	Megapodes	37	Otididae	Bustards
10	Cracidae	Guans, Chachalacas, and Curassows		MESITORNITHIFORMES	
11	Numididae	Guineafowl	38	Mesitornithidae	Mesites
12	Odontophoridae	New World Quail		EURYPYGIFORMES	
13	Phasianidae	Pheasants, Grouse, and Allies	39	Rhynchoetidae	Kagu
	GAVIIFORMES		40	Eurypygiidae	Sunbittern
14	Gaviidae	Loons		GRUIFORMES	
	PODICIPEDIDAE		41	Rallidae	Rails, Gallinules, and Coots
15	Podicipedidae	Grebes	42	Sarothruridae	Flufftails (new)
	PHOENICOPTERIFORMES		43	Heliornithidae	Finfoots
16	Phoenicopteridae	Flamingos	44	Aramidae	Limpkin
	SPHENISCIFORMES		45	Psophiidae	Trumpeters
17	Spheniscidae	Penguins	46	Gruidae	Cranes
	PROCELLARIIFORMES			CHARADRIIFORMES	
18	Diomedeidae	Albatrosses	47	Chionidae	Sheathbills
19	Procellariidae	Shearwaters and Petrels	48	Pluvianellidae	Magellanic Plover
20	Hydrobatidae	Storm-Petrels	49	Burhinidae	Thick-knees
21	Pelecanoididae	Diving-Petrels	50	Pluvianidae	Egyptian Plover (new)
	PHAETHONTIFORMES		51	Recurvirostridae	Stilts and Avocets
22	Phaethontidae	Tropicbirds	52	Ibidorhynchidae	Ibisbill
	CICONIIFORMES		53	Haematopodidae	Oystercatchers
23	Ciconiidae	Storks	54	Charadriidae	Plovers and Lapwings
	SULIFORMES		55	Pedionomidae	Plains-wanderer
24	Fregatidae	Frigatebirds	56	Thinocoridae	Seedsnipes
25	Sulidae	Boobies and Gannets	57	Rostratulidae	Painted-Snipes
26	Phalacrocoracidae	Cormorants and Shags	58	Jacanidae	Jacanas
27	Anhingidae	Anhingas	59	Scolopacidae	Sandpipers and Allies

No.	Family	Members	No.	Family	Members
	CHARADRIIFORMES (continued)			PICIFORMES	
60	Turnicidae	Buttonquail	96	Lybiidae	African Barbets
61	Dromadidae	Crab Plover	97	Megalaimidae	Asian Barbets
62	Glareolidae	Pratincoles and Coursers	98	Capitonidae	New World Barbets
63	Stercorariidae	Skuas and Jaegers	99	Semnornithidae	Toucan-Barbets
64	Alcidae	Auks, Murres, and Puffins	100	Ramphastidae	Toucans
65	Laridae	Gulls, Terns, and Skimmers	101	Indicatoridae	Honeyguides
	PTEROCLIFORMES		102	Picidae	Woodpeckers
66	Pteroclididae	Sandgrouse		CARIAMIFORMES	
	COLUMBIFORMES		103	Cariamidae	Seriemas
67	Columbidae	Pigeons and Doves		FALCONIFORMES	
	CUCULIFORMES		104	Falconidae	Falcons and Caracaras
68	Musophagidae	Turacos		PSITTACIFORMES	
69	Opisthocomidae	Hoatzin	105	Strigopidae	New Zealand Parrots
70	Cuculidae	Cuckoos	106	Cacatuidae	Cockatoos
	STRIGIFORMES		107	Psittacidae	Parrots
71	Tytonidae	Barn-Owls		PASSERIFORMES	
72	Strigidae	Owls	108	Acanthisittidae	New Zealand Wrens
	CAPRIMULGIFORMES		109	Calyptomenidae	African and Green Broadbills
73	Aegothelidae	Owlet-Nightjars	110	Eurylaimidae	Asian and Grauer's Broadbills
74	Podargidae	Frogmouths	111	Sapayoidae	Sapayoa
75	Caprimulgidae	Nightjars and Allies	112	Philepittidae	Asities
76	Nyctibiidae	Potoos	113	Pittidae	Pittas
77	Steatornithidae	Oilbird	114	Thamnophilidae	Typical Antbirds
	APODIFORMES		115	Melanopareiidae	Crescentchests
78	Apodidae	Swifts	116	Conopophagidae	Gnateaters
79	Hemiprocnidae	Treeswifts	117	Grallariidae	Antpittas
80	Trochilidae	Hummingbirds	118	Rhinocryptidae	Tapaculos
	COLIIFORMES		119	Formicariidae	Antthrushes
81	Coliidae	Mousebirds	120	Furnariidae	Ovenbirds and Woodcreepers
	TROGONIFORMES		121	Tyrannidae	Tyrant Flycatchers
82	Trogonidae	Trogons	122	Oxyruncidae	Sharpbill
	CORACIIFORMES		123	Cotingidae	Cotingas
83	Todidae	Todies	124	Pipridae	Manakins
84	Momotidae	Motmots	125	Tityridae	Tityras and Allies
85	Alcedinidae	Kingfishers	126	Menuridae	Lyrebirds
86	Meropidae	Bee-eaters	127	Atrichornithidae	Scrub-birds
87	Coraciidae	Rollers	128	Ptilonorhynchidae	Bowerbirds
88	Brachypteraciidae	Ground-Rollers	129	Climacteridae	Australasian Treecreepers
89	Leptosomidae	Cuckoo-Roller	130	Maluridae	Fairywrens
90	Upupidae	Hoopoes	131	Meliphagidae	Honeyeaters
91	Phoeniculidae	Woodhoopoes and Scimitar-bills	132	Dasyornithidae	Bristlebirds
92	Bucerotidae	Hornbills	133	Pardalotidae	Pardalotes
93*	Bucorvidae*	Ground-Hornbills*	134	Acanthizidae	Thornbills and Allies
	GALBULIFORMES		135	Pomatostomidae	Pseudo-Babblers
94	Bucconidae	Puffbirds	136	Orthonychidae	Logrunners
95	Galbulidae	Jacamars	137	Cnemophilidae	Satinbirds

No.	Family	Members	No.	Family	Members
	PASSERIFORMES (continued)		184	Pnoepygidae	Cupwings
138	Melanocharitidae	Berrypeckers and Longbills	185	Macrosphenidae	African Warblers
139	Paramythiidae	Tit Berrypecker, Crested Berrypecker	186	Cettiidae	Bush-Warblers and Allies
140	Callaeidae	Wattlebirds	187	Phylloscopidae	Leaf-Warblers
141	Notiomystidae	Stitchbird	188	Acrocephalidae	Reed-Warblers and Allies
142	Psophodidae	Whipbirds and Wedgebills	189	Locustellidae	Grassbirds and Allies
143	Cinclosomatidae	Quail-thrushes and Jewel-babblers	190	Donacobiidae	Donacobius
144	Platysteiridae	Wattle-eyes and Batises	191	Bernieridae	Malagasy Warblers
145	Vangidae	Vangas	192	Cisticolidae	Cisticolas and Allies
146	Malaconotidae	Bushshrikes and Allies	193	Sylviidae	Sylvids, Parrotbills, and Allies
147	Machaerirhynchidae	Boatbills	194	Paradoxornithidae	Parrotbills, Wrentit, and Allies (new)
148	Artamidae	Woodswallows	195	Zosteropidae	Yuhinas, White-eyes, and Allies
149	Cracticidae	Bellmagpies and Allies	196	Pellorneidae	Fulvettas and Ground Babblers
150	Pityriaseidae	Bristlehead	197	Leiotherichidae	Laughingthrushes
151	Aegithinidae	Ioras	198	Timaliidae	Babblers
152	Campephagidae	Cuckooshrikes	199	Promeropidae	Sugarbirds
153	Neosittidae	Sittellas	200	Irenidae	Fairy-bluebirds
154	Pachycephalidae	Whistlers and Allies	201	Hylotiidae	Hyliotas
155	Laniidae	Shrikes	202	Muscicapidae	Old World Flycatchers
156	Vireonidae	Vireos	203	Turdidae	Thrushes and Allies
157	Oriolidae	Old World Orioles	204	Mimidae	Mockingbirds and Thrashers
158	Dicruridae	Drongos	205	Sturnidae	Starlings
159	Rhipiduridae	Fantails	206	Buphagidae	Oxpeckers
160	Monarchidae	Monarch Flycatchers	207	Chloropseidae	Leafbirds
161	Corvidae	Crows, Jays, and Magpies	208	Dicaeidae	Flowerpeckers
162	Corcoracidae	White-winged Cough & Apostlebird	209	Nectariniidae	Sunbirds and Spiderhunters
163	Paradisaeidae	Birds-of-paradise	210	Prunellidae	Accentors
164	Petroicidae	Australasian Robins	211	Motacillidae	Wagtails and Pipits
165	Picathartidae	Rockfowl	212	Urocynchramidae	Przevalski's Rosefinch
166	Chaetopidae	Rockjumpers	213	Bombycillidae	Waxwings
167	Eupetidae	Rail-babbler	214	Mohoidae	Hawaiian Honeyeaters *[extinct]*
168	Panuridae	Bearded Reedling	215	Ptilogonatidae	Silky-flycatchers
169	Nicatoridae	Nicators	216	Dulidae	Palmchat
170	Alaudidae	Larks	217	Hylocitridae	Hylocitrea
171	Hirundinidae	Swallows	218	Hypocoliidae	Hypocolius
172	Stenostiridae	Fairy Flycatchers	219	Peucedramidae	Olive Warbler
173	Paridae	Chickadees and Tits	220	Calcariidae	Longspurs and Snow Buntings
174	Remizidae	Penduline-Tits	221	Parulidae	New World Warblers
175	Aegithalidae	Long-tailed Tits	222	Thraupidae	Tanagers and Allies
176	Sittidae	Nuthatches	223	Emberizidae	Buntings and New World Sparrows
177	Tichodromidae	Wallcreeper	224	Cardinalidae	Cardinals and Allies
178	Certhiidae	Treecreepers	225	Icteridae	Troupials and Allies
179	Troglodytidae	Wrens	226	Fringillidae	Siskins, Crossbills, and Allies
180	Poliotilidae	Gnatcatchers	227	Passeridae	Old World Sparrows
181	Cinclidae	Dippers	228	Ploceidae	Weavers and Allies
182	Pycnonotidae	Bulbuls	229	Estrildidae	Waxbills and Allies
183	Regulidae	Kinglets	230	Viduidae	Indigobirds

Changes Affecting Birds on Stamps

- Ceylon Spurfowl becomes Sri Lanka Spurfowl
 Ceylon Junglefowl becomes Sri Lanka Junglefowl
 Asian Drongo-Cuckoo becomes Square-tailed Drongo-Cuckoo
 Sapphire Quail-Dove becomes Purple Quail-Dove
 Bare-legged Owl, *Margarobyas lawrencii*
 Brown Hawk-Owl becomes Brown Boobook
 Papuan Hawk-Owl becomes Papuan Boobook
 Philippine Hawk-Owl becomes Philippine Boobook
 Halmahera Hawk-Owl becomes Halmahera Boobook
 Spot-tailed Nightjar, *Hydropsalis maculicaudus*
 Least Poorwill becomes Least Pauraque
 Pennant-winged Nightjar, *Caprimulgus vexillarius*
 Blue-headed Bee-eater has been split. The Liberia issue shows the new species Blue-moustached Bee-eater, *Merops mentalis* (see New Birds).
 Ceylon Gray Hornbill becomes Sri Lanka Gray Hornbill
 Chestnut-tipped Toucanet becomes Tepui Toucanet
 Ceylon Hanging-Parrot becomes Sri Lanka Hanging-Parrot
 Rufous-rumped Antwren, *Euchrepomis callinota*
 Red-capped Manakin, *Ceratopipra mentalis*
 Chestnut-bellied Helmetshrike becomes Red-billed Helmetshrike
 Isabelline Shrike has been split. The Turkestan issue shows the new species Red-Tailed Shrike, *Lanius phoenicuroides* (see New Birds).
 Streaked Fantail, *Rhipidura verreauxi*
 Azure-winged Magpie has been split. The Spain and Portugal issues show the new species Iberian Magpie, *Cyanopica cooki* (see New Birds).
 Ceylon Magpie becomes Sri Lanka Magpie
 Formosan Magpie becomes Taiwan Magpie
 Blue Magpie becomes Red-billed Magpie
 Bird-of-paradise becomes Bird-of-Paradise (Several species)
 Black Sicklebill, *Epimachus fastosus*
 Varied Tit, *Poecile varius*
 Yellow-bellied Tit, *Periparus venustulus*
 Great Tit has been split three ways. Issues from Antigua & Barbuda, Barbuda, Central Africa, China, Gambia, Japan, North Korea, South Korea, Palau and St. Vincent & Grenadines show the new species Japanese Tit, *Parus minor*, and the issue from North Vietnam shows the new species Cinereous Tit, *Parus cinereus* (see New Birds).
 Yellow Tit, *Parus holsti*
 Cobb's Wren has been re-split from the House Wren (Falkland Islands)
 Japanese Bush-Warbler, *Horornis diphone*
 Plain Bush-Warbler, *Horornis annae*
 Dohrn's Thrush-Babbler becomes Dohm's Thrush-Babbler, *Sylvia dohmi*, and is moved to the Sylviidae
 Fire-tailed Myzornis is moved to the Paradoxornithidae family
 Vinous-throated Parrotbill, *Sinosuthora webbiana*
 Ceylon White-eye becomes Sri Lanka White-eye
 Brown Tit-Babbler, *Macronus striaticeps*
 Large Scimitar-Babbler, *Megapomatorhinus hypoleucos*
 Sukatshev's Laughingthrush, *Ianthocincla sukatschewi*
 White-throated Laughingthrush, *Ianthocincla albogularis*
 Black-throated Laughingthrush, *Ianthocincla chinensis*
 Chestnut-capped Laughingthrush, *Ianthocincla mitrata*
 Rufous-breasted Laughingthrush becomes Black-chinned Laughingthrush, *Trochalopteron cachinnans*

Golden-winged Laughingthrush, *Trochalopteron ngoclinhensis*

Collared Laughingthrush, *Trochalopteron yersini*

Chestnut-tailed Minla, *Actinodura strigula*

Formosan Whistling-Thrush becomes Taiwan Whistling-Thrush

Ceylon Myna becomes Sri Lanka Myna

Fire-breasted Flowerpecker, *Dicaeum ignipectus*

Eastern Crimson Sunbird has been split. Issues from the Philippines show the new species Magnificent Sunbird

(see New Birds); the other issues become Crimson Sunbird.

Blue-and-yellow Tanager, *Pipraeidea bonariensis*

New Families

SAROTHRURIDAE (Flufftails)

The nine species of flufftails (three on stamps) have been split from the Rallidae. They are 6- to 7-inch long rail-like birds with short fluffy tails. They inhabit dense forests, grasslands, and marshes in Sub-Saharan Africa and Madagascar and feed on invertebrates, worms, and insects.

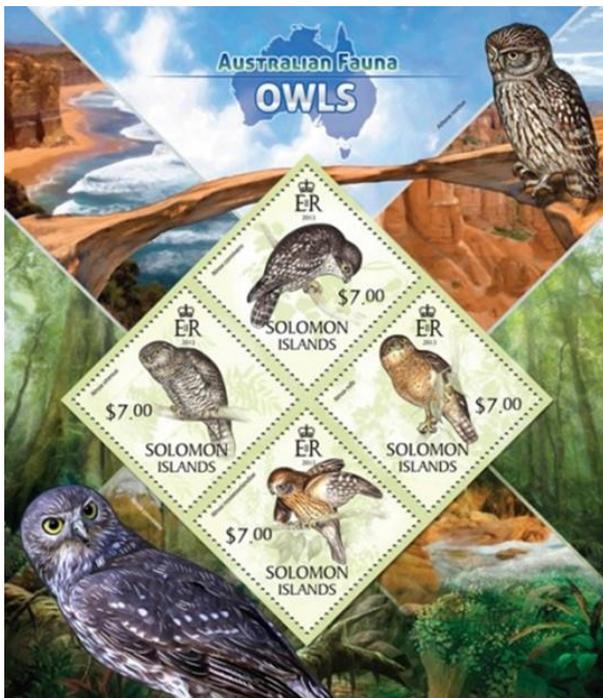
PLUVIANIDAE (Egyptian Plover)

The Egyptian Plover is an 8-inch long wading bird of Sub-Saharan Africa from Gambia to Ethiopia, Uganda, and northern Angola. It is no longer found in Egypt. It inhabits wetlands and eats mainly insects.

PARADOXORNITHIDAE (Parrotbills, Wrentits, and Allies)

This re-established family includes 38 species, all but the Wrentit of western North America are found in eastern Asia. Five species are on stamps: Fire-tailed Myzornis, Rufous-tailed Babbler, Rufous-winged Fulvetta, Vinous-breasted Parrotbill, and Reed Parrotbill. They inhabit mainly grasslands and bamboo and eat grass seeds.

NEW OWL STAMPS



(Ed. Note: Each week I receive e-mail notifications of new issues related to the Biology topic. I will include some of the notable items as fill-in material as I have done here.)

A Solomon Islands sheet from 5 October 2013 contains four \$7 se-tenant stamps each showing Australian owls with two additional species in the margins. The species depicted on the stamps are: *Ninox connivens*, *N. strenua*, *N. rufa*, and *N. novaeseelandiae*. The LL corner of the margin shows *N. connivens*. These species are all found in the Australasian region.

The UR margin shows the species *Athene noctua*. This owl is not native to Australia. It ranges throughout central Eurasia and northern Africa.

NEW BIRDS IN THE PHILATELIC AVIARY

Charles E. Braun, BU1364

Corrections

The Mao (*Gymnomyza samoensis*) was previously shown on issues from Samoa in 1969 (\$2) and 1988 (40s).

New Birds



PLUMBEOUS PIGEON, *Patagioenas plumbea* Columbidae
St. Martin, 2013 August 23, not yet cataloged, 25c

Length: 14 inches, sexes similar, resident. Gray with dark grayish-brown back, rump and tail.

Habitat: Forest and secondary growth.

Range: Colombia to Paraguay.

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



BLACK-BELLIED CUCKOO, *Piaya melanogaster* Cuculidae
St. Martin, 2013 August 23, not yet cataloged, 300c

Length: 15 inches, sexes alike, resident. Rufous-chestnut above and orange-buff below with a gray cap, dark belly, and white-spotted tail.

Habitat: Tropical lowland evergreen forest and shrubby growth.

Range: Southeastern Colombia to northern Bolivia and central Brazil.

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



LITTLE CUCKOO, *Piaya minuta* Cuculidae
St. Martin, 2013 August 23, not yet cataloged, 350c

Length: 10 inches, sexes alike, resident. Chestnut above and rufous-chestnut below with rufous wings and a white-spotted brown tail.

Habitat: Forest and low vegetation.

Range: Colombia to northern Bolivia and central Brazil.

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



WHITE-TUFTED SUNBEAM, *Aglaeactis castelnaudii* Trochilidae
Guinea-Bissau, 2013 May 20, not yet cataloged, 500fr

Length: 5 inches, sexes similar, resident. Fuscous-black with a magenta back, tawny tail, and dull brown belly.

Habitat: Evergreen montane forest.

Range: Andes of central Peru.

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



ROYAL SUNANGEL, *Heliangelus regalis* Trochilidae
Peru, 2013, not yet cataloged, 5p

Length: 5 inches, resident. The male (shown) is all dark blue. The female is dark green above and bronzy-green and spotted cinnamon below with a pale buff breast band.

Habitat: Montane elfin forest and scrub.

Range: Andes of northern Peru.

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



PURPLE-COLLARED WOODSTAR, *Myrtis fanny* Trochilidae
Peru, 2013, not yet cataloged, 5p

Length: 3 inches, resident. The male (shown) is bronze-green above and white below with an aquamarine neck bordered by a violet band. The female is green above and buffy below.

Habitat: Dry coastal scrub, open woodland, and gardens.

Range: Southwestern Ecuador to western Peru.

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



OASIS HUMMINGBIRD, *Rhodopsis vesper* Trochilidae (previously on an issue from Staffa)

Peru, 2013, not yet cataloged, 5p

Length: 5 inches, resident. The male (shown) is olive-green above and white below with a rufous rump and a rosy-violet throat. The female has a white throat.

Habitat: Arid steppes, oases, and gardens.

Range: Northwestern Peru to northern Chile.

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



GRAY-BELLIED COMET, *Taphrolesbia griseiventris* Trochilidae
Peru, 2013, not yet cataloged, 5p

Length: 6 to 7 inches, resident. The male is bronzy-green above and light gray below with a blue throat. The female lacks the blue throat.

Habitat: Bushy semi-arid areas with scattered trees or thickets.

Range: Andes of northwestern Peru.

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



BLUE-MOUSTACHED BEE-EATER, *Merops mentalis* Meropidae
Liberia, 1997, Sc#1284, 15c

Length: 8 inches, sexes similar, resident. Blue with deep chestnut back wings and throat.
Habitat: Lowland rainforest.

Range: Sierra Leone to southwestern Mali and Bioko (Fernando Po).

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 6.



SPOT-WINGED ANTSHRIKE, *Pygoptila stellaris* Thamnophilidae
St. Martin, 2013 August 23, not yet cataloged, 400c

Length: 5 inches, resident. The male (shown) is gray with a black cap and white spots on the wing. The female is gray above and pale clay below with cinnamon-tawny wings.

Habitat: Evergreen forest and adjacent tall second growth.

Range: Guianas to Bolivia and Amazonian Brazil.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 6.



RUFOUS-BELLIED ANTWREN, *Myrmotherula guttata* Thamnophilidae
St. Martin, 2013 August 23, not yet cataloged, 225c

Length: 3.5 inches, resident. The male (shown) is gray with a tawny belly and blackish-brown wings with pale cinnamon wing bars. The female is similar, but olive-gray above and tawny below.

Habitat: Forest understory.

Range: Eastern Venezuela to northern Brazil.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 6.



OCHRE-BELLIED FLYCATCHER, *Mionectes oleagineus* Tyrannidae
St. Martin, 2013 August 23, not yet cataloged, 150c

Length: 5 inches, sexes similar, resident. Olive above and cinnamon-buff below with a streaky gray throat.

Habitat: Forest, woodland, and adjacent clearings and gardens.

Range: Southern Mexico to Trinidad, northern Bolivia, and southeastern Brazil.

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



RED-TAILED SHRIKE, *Lanius phoenicuroides* Laniidae
Turkmenistan, 2002 December 1, Sc#87b, 3000m

Length: 7 inches, migratory. The male (shown) is gray above and white below with a black mask and a rufous crown and tail. The female has a gray crown.

Habitat: Breeds in tamarisk thickets. Winters in semi-desert.

Range; Breeds from Iran to Pakistan, southern Kazakhstan, and western China.

Winters from West Africa to Arabia.

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



PURPLISH JAY, *Cyanocorax cyanomelas* Corvidae
St. Martin, 2013 August 23, not yet cataloged, 75c

Length: 15 inches, sexes similar, resident. Violet-tinged dark drab brown with a black head and neck.

Habitat: Forest and adjacent areas.

Range: Southeastern Peru to southwestern Brazil and northern Argentina.

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



IBERIAN MAGPIE, *Cyanopica cooki* Corvidae
Spain, 1973 July 3, Sc#1763, 5p

Length: 14 inches, sexes similar, resident. Grayish-brown with a black hood and blue wings and tail.

Habitat: Open woodland with grassy clearings.

Range: Spain and Portugal.

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



MAGNIFICENT SUNBIRD, *Aethopyga magnifica* Nectariniidae
Philippines, 2007 December 12, Sc#3122, 4p

Length: 6 inches, resident. The male (shown) is red with dark forehead, wings, belly and tail and a bright orange-yellow rump.

Habitat: Forest, forest edge, parkland, and gardens.

Range: West central Philippines.

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



TAWNY PIPIT, *Anthus campestris* Motacillidae
Lithuania, 2013 September 7, not yet cataloged, 2.90L

Length: 7 inches, sexes alike, migratory. Sandy-brown above and creamy-white below with a pale supercilium.

Habitat: Open dry areas.

Range: Breeds from Denmark and Morocco to northwestern China. Winters from West Africa to India.

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



JAPANESE TIT, *Parus minor* Paridae
Korea (North), 1965 December 30, Sc#635, 10c

Length: 5 inches, sexes similar, resident. Olive above and pinkish-white below with a white face and black crown, throat, and central belly.

Habitat: Forest edges and clearings.

Range: Southeastern Russia to Thailand, Japan, and the northern and central Ryukyu Islands.

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



CINEREOUS TIT, *Parus cinereus* Paridae
Vietnam (North), 1973 July 15, Sc#706, 50xu

Length: 5 inches, sexes similar resident, Gray above and whitish face and below with a black crown, throat, and central belly.

Habitat: Forest edges and clearings.

Range: Afghanistan to Java, Hainan, and the southern Ryukyu Islands.

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



COCOA THRUSH, *Turdus fumigatus* Turdidae
St. Martin, 2013 August 23, not yet cataloged, 475c

Length: 8.5 to 9.5 inches, sexes similar, resident. Brown above and orange-brown below with a pale vent.

Habitat: Forest, woodland, and adjacent clearings.

Range: Southern Lesser Antilles, Grenada, and Colombia to southeastern Brazil.

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



GRAY-HEADED TANAGER, *Eucometis penicillata* Thraupidae
St. Martin, 2013 August 23, not yet cataloged, 100c

Length: 7 inches, sexes similar, resident. Yellowish-olive above and yellow below with a gray head.

Habitat: Forest, woodland, undergrowth, and shrubs.

Range: Southeastern Mexico to Paraguay.

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

CAYMAN ISLANDS		2012 October 9 (Marine Life Type of 2012)		
1118	25c	Stoptlight Parrotfish, <i>Sparisoma viride</i>	Scaridae	A*
1118a		Bklt pane 10 (Sc#1118)		
CHINA (Taiwan)		2012 December 12 (Marine Life)		
4082a	\$10	Pelican Eel, <i>Eurypharynx pelecyanoides</i>	Eurypharyngidae	A*
4082b	\$10	<i>Bufoceratias shaoi</i>	Diceratiidae	A*
4082c	\$12	Hatchetfish, <i>Argyropelecus aculeatus</i>	Sternoptychidae	A*
4082d	\$12	Oarfish, <i>Regalecus glesne</i>	Regalecidae	A*
4082		MS of 4 (Sc#4082a–d)		
4083	SS \$25	Margin: U/I deep sea fish		A*
		2013 May 22 (Congratulations) (Set of 4)		
4114	\$3.50	Stylized tropical fish		S
CHINA P. R.		2012 October 26 (History of Merchant Ships)		
4051–53	\$1.20	Set of 3 (no fish)		R
4053a		SS of 6 (2ea Sc#4051–53) (no fish)		
CHRISTMAS ISLAND		2013 January 13 (New Year 2013: Year of the Snake)		
511e	20c	Stylized fish (with tiger)		S
511q		Bklt pane 4 (Sc#511b, 511e, 2ea 509)		
511		MS of 14 (Sc#509–10, 511a–l) (perf 14¾×14)		
512i	55c	Like 511e with purple foil (s/a)		S
512		MS of 13 (Sc#512a–m) (die cut 12¼) (s/a)		
		2013 May 21 (Fish)		
513a	60c	Cocos Angelfish, <i>Centropyge colini</i>	Pomacanthidae	A*
513b	60c	Ladder Wrasse (Christmas Wrasse), <i>Thalassoma trilobatum</i>	Labridae	A*
513		Horiz pair (Sc#513a–b)		
514	\$1.20	Redtooth Triggerfish, <i>Odonus niger</i>	Balistidae	A*
515	\$1.80	Red-striped Pigfish (Blackspot hogfish), <i>Bodianus opercularis</i>	Labridae	A*
CYPRUS		2013 June 5 (Marine Life) (Set of 3)		
1192	34c	Seahorse, <i>Hippocampus</i> sp.	Syngnathidae	A*
FRANCE		2013 February 4 (Animal Proverbs and Idioms)		
4339	(58c)	Stylized sardine (Be packed like sardines)		S
4340	(58c)	Stylized fish (Be happy as a fish in water)		S
4349a		Bklt pane of 12 (Sc#4338–49) s/a		
		2013 April 29 (Impressionist Paintings Depicting Water)		
4394	(58c)	Fishermen (painting by Georges Seurat)		R
4397a		Bklt pane of 12 (Sc#4386–97) s/a		
FRENCH SOUTHERN & ANTARCTIC TERR.		2013 January 1		
474	€1	Grey Rockcod, <i>Lepidonotthen squamifrons</i>	Nototheniidae	A*
GIBRALTAR		2013 August 1 (Definitive Types of 1953)		
1392	16p	Tunny fishing industry		R
		2013 September 14 (Endangered Animals Type of 2011)		
1406	42p	Atlantic Bluefin Tuna, <i>Thunnus thynnus</i> (perf 12½×13)	Scombridae	A*
1410a		SS of 6 (Sc#1405–10) (perf 13¼×13)		
GRENADA		2013 January 3 (Seashells)		
3872	SS \$3.50	Margin: Seahorse, <i>Hippocampus</i> sp.	Syngnathidae	Z

GUYANA		2012-13? (Surcharges)		
4187	\$20 on 6c	Two-spotted Cichlid, <i>Cichlasoma bimaculatum</i> (Sc#72 surch)		A*
INDONESIA		2013 May 1 (Transfer of Control of West Irian 50th Anniv.)		
2346b	2500r	Stylized fish with produce		S
2346		Strip of 3 (Sc#2346a–c)		
		2013 June 5 (World Environment Day)		
2351	SS 5000r	Margin: Tiny stylized fish in symbol		S
ISRAEL		2013 May 26 (National Trail)		
1981b	2s	Tiny stylized image with swimmer		S
1981		MS of 10 (Sc#1981a–j)		
JAPAN		2013 June 4 (Doraemon Cartoon)		
3552d	80¥	Stylized fish with children		S
3552		MS of 10 (Sc#3552a–j)		
		2013 July 23		
3566	50¥	Goldfish, <i>Carassius auratus</i> (in bowl)	Cyprinidae	B
KOREA (North)		2007 October 15 (2008 Beijing Olympics)		
4691a	3w	Stylized 3D image		S
4691	(500w)	MS of 5 (Sc#4691a–e) (3D plastic attached)		
LIBERIA		2013 April 4 (<i>Chamber of Art and Curiosities</i> by Francken)		
2854a	\$75	U/I tropical fish specimen		U
2854b	\$75	Seahorse specimen, <i>Hippocampus</i> sp.	Syngnathidae	B
2854		MS of 5 (Sc#2854a–e)		
MARSHALL ISLANDS		2103 January 28 (Marine Life Type of 2013)		
1053	\$44.95	Groupers	Serranidae	A*
MAURITANIA		2011 (Fish)		
825	100um	Daisy Stingray, <i>Dasyatis margarita</i>	Dasyatidae	A*
826	220um	Guitarfish, <i>Rhinobatos</i> sp.	Rhinobatidae	A*
827	370um	Spinner Shark, <i>Carcharhinus brevipinna</i>	Carcharhinidae	A*
MONACO		2013 June 8 (Sharks)		
2729a	63c	Blacktip Shark, <i>Carcharhinus melanopterus</i>	Carcharhinidae	A*
2729b	63c	Tiger Shark, <i>Galeocerdo cuvieri</i>	Carcharhinidae	A*
2729c	€1.05	Whale Shark, <i>Rhincodon typus</i>	Rhincodontidae	A*
2729d	€1.05	Great White Shark, <i>Carcharodon carcharias</i>	Lamnidae	A*
2729		MS of 4 (Sc#2729a–d)		
MONTENEGRO		2012 May 14 (Tourism)		
310	95c	Stylized fish decoration on suitcase		S
310a		SS of 4 (Sc#307–10)		
NEW ZEALAND		2013 June 5 (Maori New Year)		
2467f	\$2.90	Leopard Flounder (Patiki), <i>Bothus pantherinus</i>	Bothidae	B*
2467		MS of 6 (Sc#2467a–f) (perf 13¾×13½)		
2468f	\$2.90	Leopard Flounder (Patiki), <i>Bothus pantherinus</i>	Bothidae	B*
2468		MS of 6 (Sc#2468a–f) (die cut 9½×10) (s/a)		

NEW ZEALAND (continued)		2013 August 7 (Classic Travel Posters)		
2474b	70c	Fishing boat and fish		R
2474e	70c	Fisherman in river		R
2474		Sheet of 20 (Sc#2474a-l)		
ST. PIERRE & MIQUELON		2013 March 13 (Fishing Industry)		
968a	63c	Cod, <i>Gadus morhua</i> (workers processing)	Gadidae	C
968b	63c	Fishermen in boats		R
968c	63c	Cod, <i>Gadus morhua</i> (dried with workers)	Gadidae	C
968d	63c	Fishermen in water pulling in net		R
968		MS of 4 (Sc#968a-d)		
		2013 March 27 (Trawler <i>Le Finlande</i>)		
969	€1.30	Fishing trawler		R
		2013 June 1 (Church of Miquelon Frescoes by Detcheverry)		
972g	63c	Fishing boat (<i>The Miraculous Catch</i>)		R
972		MS of 7 (Sc#972a-g)		
ST. THOMAS & PRINCE ISLANDS		2010 September 2		
2315 MS	110000d	Margin: Stylized in biodiversity logo (Intl. Year of Biodiversity)		S
2317c	20000d	Anemonefish, <i>Amphiprion nigripes</i> (Maldives Sc#1187 s-o-s)	Pomacentridae	B*
2317		MS of 5 (Sc#2317a-e) (WWF s-o-s)		
2324 SS	100000d	Margin: U/I sp. (Intl. Year of Biodiversity)		Z
2327 SS	110000d	Margin: <i>Carcharhinus melanopterus</i> (Cocos Isl. Sc#342 s-o-s)	Carcharhinidae	B*
		2010 December 1		
2347a	10000d	Stylized on 50c coin		S
2347		MS of 6 (Sc#2347a-f) (Coins)		
2355 SS	100000d	Stylized on 100,000d banknote		S
SLOVAKIA		2013 June 7 (Sun & Zodiac Symbols)		
665	(45c)	Pisces Zodiac symbol		S
SLOVENIA		2013 May 24 (Personalized Pet Stamps)		
998	(27c)	Pet fish (personalized-horiz)		A
999	(31c)	Pet fish (personalized-horiz)		A
1000	(60c)	Pet fish (personalized-horiz)		A
1001	(64c)	Pet fish (personalized-horiz)		A
1002	(27c)	Pet fish (personalized-vert)		A
1003	(31c)	Pet fish (personalized-vert)		A
1004	(60c)	Pet fish (personalized-vert)		A
1005	(64c)	Pet fish (personalized-vert)		A
SOUTH AFRICA		2013 March 22 (Intl. Year of Water Cooperation)		
1493e	(6.3r)	Stylized fish with dragonfly		S
1493		MS of 5 (Sc#1493a-e)		
SOUTH GEORGIA & SOUTH SANDWICH ISL.		2013 August 29 (Shallow Marine Surveys Group)		
482	£1	Crocodile fish, <i>Parachaenichthys georgianus</i>	Bathydraconidae	A*
484c	£1	Crocodile fish, <i>Parachaenichthys georgianus</i>	Bathydraconidae	A*
484		Strip of 4 (Sc#484a-d) (without white frames)		
SPAIN		2013 June 3 (Endangered Marine Life) (MS of 4)		
3912b	37c	Atlantic Bluefin Tuna, <i>Thunnus thynnus</i>	Scombridae	A*
3912d	37c	Sea Lamprey, <i>Petromyzon marinus</i>	Petromyzontidae	A*

SRI LANKA**2012 December 7** (Aviation in Sri Lanka)

1866	25r	Fishermen fishing below airliner taking off		R
1866a		SS of 4 (Sc#1863–66)		

SURINAME**2011 April 4** (Maastricht Paper Money Fair)

1419f	\$3.50	U/I tropical fish (French Polynesia 10,000fr note)		U
1419		Block of 12 (Sc#1419a–l)		

2013 May 15 (Fish)

1452a	55c	Coney, <i>Cephalopholis fulva</i>	Serranidae	A*
1452b	\$1.45	Red Hind, <i>Epinephelus guttatus</i>	Serranidae	A*
1452c	\$2.50	Barred Hamlet, <i>Hypoplectrus puella</i>	Serranidae	A*
1452d	\$3.50	Butter Hamlet, <i>Hypoplectrus unicolor</i>	Serranidae	A*
1452e	\$4.50	Candy Basslet, <i>Liopropoma carmabi</i>	Serranidae	A*
1452f	\$5.50	Orangeback Bass, <i>Serranus annularis</i>	Serranidae	A*
1452g	\$6.50	Tobaccofish, <i>Serranus tabacarius</i>	Serranidae	A*
1452h	\$7.50	Graysby, <i>Petrometopon cruentatum</i>	Serranidae	A*
1452i	\$8.50	Yellowfin Grouper, <i>Mycteroperca venenosa</i>	Serranidae	A*
1452j	\$9.50	Lantern Bass, <i>Serranus baldwini</i>	Serranidae	A*
1452		Sheet of 10 (Sc#1452a–j)		

SWITZERLAND**2013 September 5** (Restoration of Waterways)

1498c	100c	Stylized fish		S
1498		Horiz strip of 3 (Sc#1498a–c)		

TONGA**2013 June 4** (Blow Holes and Fish)

1202a	3pa	Black Butterflyfish, <i>Chaetodon flavirostris</i>	Chaetodontidae	C
		Square-spot Fairy Basslet, <i>Pseudanthias pleurotaenia</i>	Serranidae	C
1202b	3pa	Empress Angelfish, <i>Pygoplites diacanthus</i>	Pomacanthidae	C
		Tongan Blackfin, <i>Amblyglyphidodon melanopterus</i>	Pomacentridae	C
1202c	4pa	Mustard Surgeonfish, <i>Acanthurus guttatus</i>	Acanthuridae	C
		Doubletooth Soldierfish, <i>Myripristis hexagona</i>	Holocentridae	C
1202d	4pa	Square-spot Fairy Basslet, <i>Pseudanthias pleurotaenia</i>	Serranidae	C
		Moorish Idol, <i>Zanclus cornutus</i>	Zanclidae	C
1202e	5pa	Moorish Idol, <i>Zanclus cornutus</i>	Zanclidae	C
		Empress Angelfish, <i>Pygoplites diacanthus</i>	Pomacanthidae	C
1202f	5pa	Tongan Blackfin, <i>Amblyglyphidodon melanopterus</i>	Pomacentridae	C
		Doubletooth Soldierfish, <i>Myripristis hexagona</i>	Holocentridae	C
1202		MS of 6 (Sc#1202a–f)		

TUVALU**2013 July 24** (Fish of the Pacific)

1251a	\$1.25	Bluehead Fairy Wrasse, <i>Cirrhilabrus cyanopleura</i>	Labridae	A*
1251b	\$1.25	Clownfish, <i>Amphiprion ocellaris</i>	Pomacentridae	A*
1251c	\$1.25	Clown Triggerfish, <i>Balistoides conspicillum</i>	Balistidae	A*
1251d	\$1.25	Copperband Butterflyfish, <i>Chelmon rostratus</i>	Chaetodontidae	A*
1251		MS of 4 (Sc#1251a–d)		
1252a	\$1.25	Scribbled Angelfish, <i>Chaetodontoplus duboulayi</i>	Pomacanthidae	A*
1252b	\$1.25	Flame Angelfish, <i>Centropyge loricula</i>	Pomacanthidae	A*
1252c	\$1.25	Harlequin Tusk, <i>Choerodon fasciatus</i>	Labridae	A*
1252d	\$1.25	Flameback Angelfish, <i>Centropyge aurantonotus</i>	Pomacanthidae	A*
1252		MS of 4 (Sc#1251a–d)		

UNITED NATIONS**2013 May 31** (World Oceans Day: Dr. Zeus Characters)

1067a	46c	Stylized green fish & red fish	S
1067b	46c	Stylized red fish	S
1067c	46c	Stylized green fish	S
1067d	46c	Stylized yellow fish	S
1067e	46c	Stylized blue fish	S
1067f	46c	Stylized red fish	S
1067g	46c	Stylized red fish, tail of yellow and red fish	S
1067h	46c	Stylized yellow & red fish, green fish, side of blue fish	S
1067i	46c	Stylized head of blue fish	S
1067j	46c	No fish (sign and wave)	S
1067k	46c	Stylized red fish, side and tail of blue fish	S
1067l	46c	Stylized side of blue fish, green fish	S
1067		Sheet of 12 (Sc#1067a-l)	

UNITED NATIONS (Geneva)**2013 May 31** (World Oceans Day: Dr. Zeus Characters)

566a	85c	Stylized three red fish	S
566b	85c	Stylized green fish & tail of yellow fish	S
566c	85c	Stylized three red fish, part of red fish tail	S
566d	85c	Stylized two green fish	S
566e	85c	Stylized red fish	S
566f	85c	Stylized tail of red fish, yellow & red fish	S
566g	85c	Stylized red fish	S
566h	85c	Stylized yellow & red fish	S
566i	85c	Stylized two green fish	S
566j	85c	Stylized red fish	S
566k	85c	Stylized two green fish & red fish	S
566l	85c	Stylized yellow fish	S
566		Sheet of 12 (Sc#566a-l)	S

UNITED NATIONS (Vienna)**2013 May 31** (World Oceans Day: Dr. Zeus Characters)

528a	70c	Stylized green fish	S
528b	70c	Stylized red fish	S
528c	70c	Stylized three green fish	S
528d	70c	Stylized red fish & back half of red fish	S
528e	70c	Stylized red fish & front half of red fish	S
528f	70c	Stylized two red fish	S
528g	70c	Stylized two green fish	S
528h	70c	Red fish, head of blue fish	S
528i	70c	Stylized yellow fish	S
528j	70c	Stylized yellow fish & back of blue fish	S
528k	70c	Stylized two red fish & body of blue fish	S
528l	70c	Stylized tail of yellow fish & two green fish	S
528		Sheet of 12 (Sc#528a-l)	S

URUGUAY**2013** (Rural Workers)

2418	45p	Worker processing fish	C
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MARINE INVERTEBRATES

Editor

Ian Hunter, BU1619



Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
ALBANIA 2012 December 14 (Marine Life and Plants)				
2935b	250L	Coral, fish, sea grasses		U B
2935c	260L	Bklt pane 2+2 labels (Sc#2935a-b)		
2935	260L	Horiz pair (Sc#2935a-b)		
ARUBA 2013 April 5 (Aruban Bank Notes)				
425a	200c	Shell on 10-florin banknote		U B
425	1000c	Horiz strip of 5 (Sc#425a-e)		
BELGIUM 2013 February 11 (Road Safety)				
2621d	(€1.34)	Snail on road at night (child's drawing)		S
2621	(€6.70)	MS of 5 (Sc#2621a-e)		
BRAZIL 2012 June 1 (UN Conference on Sustainable Development)				
3218s	(1.10r)	Birds and crabs in mangrove swamp		U B
3218x	(1.10r)	SCUBA diver, whale, turtle, jellyfish, and marine life		U B
3218	(26.40r)	MS of 24 (Sc#3218a-x)		
CAYMAN ISLANDS 2012 October 9 (Marine Life Type of 2012)				
1119	75c	Common Sea Fan, <i>Gorgonia ventalina</i>	Gorgoniidae	A
		Yellow Tube Sponge, <i>Aplysina fistularis</i>	Aplysinidae	B
1119a	750c	Bklt pane 10 (Sc#1119)		
1120	80c	Upside-down Jellyfish, <i>Cassiopeia xamachana</i>	Cassiopeidae	A
1120a	800c	Bklt pane 10 (Sc#1120)		
CHINA (Taiwan) 2012 December 12 (Marine Life)				
4083	SS \$25	Jewel Squid, <i>Histioteuthus celetaria pacifica</i>	Histioteuthidae	A
2013 January 31 (Chinese Dishes)				
4088b	\$5	Mud Crab with glutinous rice cake, cup of green tea, salt shaker		A
4088	\$20	Horiz strip of 4 (Sc#4088a-d)		
CYPRUS 2013 June 5 (Marine Life)				
1193	43c	Sea Anemone		U A
1194	€1.71	Sea Fan Coral		U A
FALKLAND ISLANDS 2013 March 28 (Predators and Prey)				
1089	£1.20	Lobster Krill, <i>Munida gregaria</i>	Munididae	A
FAROE ISLANDS 2013 February 25 (Crustaceans)				
595	7k	Edible Crab, <i>Cancer pagurus</i>	Cancridae	A
596	9k	Deep-Sea Red Crab, <i>Chaceon affinis</i>	Geryonidae	A
597	23k	Northern Prawn, <i>Pandalus borealis</i>	Pandalidae	A
598	34k	Norway Lobster, <i>Nephrops norvegicus</i>	Nephropidae	A

FRENCH SOUTHERN & ANTARCTIC TERR.		2013 January 1 (Helicopters) (MS of 6)		
480	€6	Stylized Lobster, <i>Jasus paulensis</i>	Palinuridae	S
IRELAND		2013 April 2 (Wildlife)		
1994	90c	Beadlet Anemone, <i>Actinia equina</i>	Actiniaria	A
1994a	900c	Bklt pane 10 (Sc#1994)		
NIGER		2013 April 15 (Pope Benedict XVI)		
1177b	675fr	Scallop, <i>Pecten jacobaeus</i> (in Papal Crest) (denom at LL)	Pectinidae	C
1177c	675fr	Scallop, <i>Pecten jacobaeus</i> (in Papal Crest) (denom at UR)	Pectinidae	C
1202	SS 2000fr	Scallop, <i>Pecten jacobaeus</i> (in Papal Crest)	Pectinidae	C
ST. KITTS		2012 October 1 (Game Fish of the Caribbean)		
836	SS \$6	Corals beneath fish (margin)		U Z
		2012 October 1 (Shells)		
839a	\$2.75	Tapestry Turban, <i>Turbo petholatus</i>	Turbinidae	A
839b	\$2.75	Pontifical Miter, <i>Mitra stictica</i>	Mitridae	A
839c	\$2.75	Root Murex, <i>Muricanthus radix</i>	Muricidae	A
839d	\$2.75	Pink Throat Murex, <i>Murex bicolor</i>	Muricidae	A
839	\$11	MS of 4 (Sc#839a–d)		
840	SS \$6	Ass's Ear Abalone, <i>Haliotis asinina</i>	Haliotidae	A
ST. PIERRE & MIQUELON		2013 February 16 (Bulot the Carnival King)		
966	€1.13	Stylized Snail as Bulot, the Carnival King		S
ST. THOMAS & PRINCE ISLAND		2008 February 4 (Shells and Lighthouses)		
1799a	5000d	Common Pelican's Foot, <i>Aporrhais pespelecani</i>	Aporrhaidae	A
1799b	5000d	A Murex Shell, <i>Boreotrophon fraseri</i>	Muricidae	A
1799c	5000d	A Cone Shell, <i>Conus guanche</i>	Conidae	A
1799d	70000d	A Marginella Shell, <i>Marginella senegalensis</i>	Marginellidae	A
1799	85000d	MS of 4 (Sc#1799a–d)		
		2008 March 28 (Apparition at Lourdes)		
1846a	5000d	Scallop, <i>Pecten jacobaeus</i> (in Papal Crest)	Mitridae	C
1846	85000d	MS of 4 (Sc#1846a–d)		
		2008 May 19 (Churches)		
1855c	30000d	Scallop, <i>Pecten jacobaeus</i> (in Papal Crest)	Mitridae	C
1855	100000d	MS of 4 (Sc#1855a–d)		
		2008 September 14 (Dolphin and SCUBA diver)		
1901a	20000d	Starfish (with <i>D. delphis</i> and SCUBA diver)		U B
1901b	20000d	Starfish (with <i>G. griseus</i> and SCUBA diver)		U B
1901c	20000d	Starfish (with <i>P. gangetica</i> and SCUBA diver)		U B
1901d	40000d	Starfish (with <i>C. commersonii</i> and SCUBA diver)		U B
1901	100000d	MS of 4 (Sc#1901a–d)		
1909	SS 100000d	Starfish (with <i>T. truncatus</i> and SCUBA diver)		U B
		2008 November 3 (Shells)		
1913a	20000d	L: Cowry, <i>Cypraea algoensis</i>	Cypraeidae	A
		R: Antarctic Scallop, <i>Adamussium colbecki</i>	Pectinidae	A
1913b	20000d	L: Moon Shell, <i>Lunatia grossularia</i>	Naticidae	A
		R: Gever's Trophon, <i>Trophon geversianus</i>	Muricidae	A
1913c	20000d	L: Common Northern Whelk, <i>Buccinum undatum</i>	Buccinidae	A
		R: Sea Snail, <i>Angaria vicdani</i>	Angariidae	A

ST. THOMAS & PRINCE ISLAND (continued)

1913d	40000d	L: Common Mussel, <i>Mytilus edulis</i>	Mytilidae	A
		R: Variable Abalone, <i>Haliotis varia</i>	Haliotidae	A
1913	100000d	MS of 4 (Sc#1913a–d)		
	Margin	LR: <i>Haustellum kurodai langleyatae</i>	Muricidae	A
		LR: <i>Ampelita consanguinea</i>	Acavidae	A
1916 SS	100000d	L: European Cockle, <i>Cardium edule</i>	Cardiidae	A
		R: Perspective Sundial, <i>Architectonica perspectiva</i>	Architectonicidae	A
	Margin	LL: Reddish Callista, <i>Callista erycina</i>	Veneridae	Z
		CTR: Little Deer Cowry, <i>Cypraea cervinetta</i>	Cypraeidae	Z
		CTR: Striped Pyjama Squid, <i>Sepioloidea lineolata</i>	Sepiadariidae	Z
		Bot: Pink Shrimp, <i>Pandalus montagui</i>	Pandalidae	Z
		ML: U/I Anemone		U Z
		ML: U/I Starfish		U Z

2008 November 3 (Jules Verne)

1921d	30000d	Stylized Octopus		S
1921	100000d	MS of 4 (Sc#1921a–d)		

2009 January 31 (Shells and Crabs)

1942a	13000d	Japanese Wonder Shell, <i>Thatcheria mirabilis</i>	Raphitomidae	A
1942b	13000d	Pink Bubble, <i>Aplustrum amplustre</i>	Aplustridae	A
1942c	39000d	Elegant Marginella, <i>Cryptospira elegans</i>	Marginellidae	A
1942d	39000d	Northern Quahog Clam, <i>Mercenaria mercenaria</i>	Veneridae	A
1942	104000d	MS of 4 (Sc#1942a–d)		
1946a	15000d	Masked Crab, <i>Corystes cassivelaunus</i>	Corystidae	A
1946b	25000d	Japanese Spider Crab, <i>Macrocheira kaempferi</i>	Inachidae	A
1946c	30000d	Blue Crab, <i>Callinectes sapidus</i>	Portunidae	A
1946d	30000d	Tasmanian Giant Crab, <i>Pseudocarcinus gigas</i>	Menippidae	A
1946	100000d	MS of 4 (Sc#1946a–d)		

2009 March 31 (Sharks and Jellyfish)

1960a	15000d	Irukandji Jellyfish, <i>Carukia barnesi</i>	Carukiidae	A
1960b	25000d	Moon Jellyfish, <i>Aurelia aurita</i>	Ulmaridae	A
1960c	30000d	Fried Egg Jellyfish, <i>Phacellophora camtschatica</i>	Phacellophoridae	A
1960d	30000d	Mauve Stinger, <i>Pelagia noctiluca</i>	Pelagiidae	A
1960	100000d	MS of 4 (Sc#1960a–d)		
1974	100000d	Irukandji Jellyfish, <i>Carukia barnesi</i>	Carukiidae	A
	Margin	UR: Moon Jellyfish, <i>Aurelia aurita</i>	Ulmaridae	Z
		UL: U/I Jellyfish		U Z
		LR: U/I Jellyfish		U Z
		LL: U/I Corals		U Z

2009 April 15 (surch/ovpt “2008/LOCAL até 20 g”) (silver)

1987	(8000d)	Rosy Harp, <i>Harpa doris</i> (on 1.50d Sc#608)	Harpidae	A
1990	(8000d)	Little Frog Conch, <i>Persististrombus latus</i> (on 11d Sc#609)	Strombidae	A
1993	(8000d)	Elephant’s Snout Volute, <i>Cymbium glans</i> (on 17d Sc#610)	Volutidae	A

2009 April 15 (surch/ovpt “2008/ZONA 1 até 20 g”) (silver)

2014	(14000d)	Rosy Harp, <i>Harpa doris</i> (on 1.50d Sc#608)	Harpidae	A
2017	(14000d)	Little Frog Conch, <i>Persististrombus latus</i> (on 11d Sc#609)	Strombidae	A
2020	(14000d)	Elephant’s Snout Volute, <i>Cymbium glans</i> (on 17d Sc#610)	Volutidae	A

ST. THOMAS & PRINCE (cont)		2009 April 15 (surch/ovpt "2008/ZONA 2 até 20 g") (silver)		
2041	(14000d)	Rosy Harp, <i>Harpa doris</i> (on 1.50d Sc#608)	Harpidae	A
2044	(14000d)	Little Frog Conch, <i>Persististrombus latus</i> (on 11d Sc#609)	Strombidae	A
2047	(14000d)	Elephant's Snout Volute, <i>Cymbium glans</i> (on 17d Sc#610)	Volutidae	A
		2009 April 15 (surch/ovpt "2008/ZONA 3 até 20 g") (silver)		
2068	(14000d)	Rosy Harp, <i>Harpa doris</i> (on 1.50d Sc#608)	Harpidae	A
2071	(14000d)	Little Frog Conch, <i>Persististrombus latus</i> (on 11d Sc#609)	Strombidae	A
2074	(14000d)	Elephant's Snout Volute, <i>Cymbium glans</i> (on 17d Sc#610)	Volutidae	A
		2009 May 29 (Shells and Prehistoric Creatures)		
2106a	25000d	Shell and Marine Prehistoric Animal		U B
2106b	30000d	Shell and Marine Prehistoric Animal		U B
2106c	35000d	Shell and Marine Prehistoric Animal		U B
2106d	35000d	Shell and Marine Prehistoric Animal		U B
2106	125000d	MS of 4 (Sc#2106a-d)		
	Margin	MR: U/I Shell		U Z
		Bot: U/I Shell		U Z
2126	SS 100000d	Shell and Marine Prehistoric Animal		U B
	Margin	UL: 3×U/I Shell		U Z
ST. VINCENT		2013 February 28 (Coral Reefs)		
3843b	\$3.50	Sea sponges and tropical fish		U A
3843c	\$3.50	Red Cushion Sea Star, <i>Oreaster reticulatus</i>	Oreasteridae	A
3843d	\$3.50	Soft Coral, <i>Ricordea florida</i>	Ricordeidae	A
3843	\$14	MS of 4 (Sc#3843a-d)		
	Margin	Bot: U/I Anemone		U Z
		Top: U/I Corals		U Z
3844	SS \$9	Coral Reef (with Turtle & Fish)		A
		2013 February 28 (Crabs)		
3845a	\$3.50	Clinging Crab		A
3845b	\$3.50	Yellowline Arrow Crab, <i>Stenorhynchus seticornis</i>	Inachidae	A
3845c	\$3.50	Redeye Sponge Crab, <i>Dromia erythropus</i>	Dromiidae	A
3845d	\$3.50	White-spotted Hermit Crab, <i>Dardanus megistos</i>	Diogenidae	A
3845	\$14	MS of 4 (Sc#3845a-d)		
SIERRA LEONE		2011 October 3 (Deep Ocean Creatures)		
3100a	5000le	Comb Jellyfish, <i>Bathocyroe fosteri</i>	Bathocyroidae	A
3100b	5000le	Glowing Sucker Octopus, <i>Stauroteuthis syrtensis</i>	Stauroteuthidae	A
3100c	5000le	Jellyfish, <i>Voragonema (=Benthocodon) pedunculata</i>	Rhopalonematidae	A
3100	20000le	MS of 4 (Sc#3100a-d)		
3101a	5000le	Dumbo Octopus, <i>Grimpotteuthis innominata</i>	Opisthoteuthidae	A
3101b	5000le	Vampire Squid, <i>Vampyroteuthis infernalis</i>	Vampyroteuthidae	A
3101d	5000le	Ping Pong Tree Sponge, <i>Chondrocladia lampadiglobus</i>	Cladorhizidae	A
3101	20000le	MS of 4 (Sc#3101a-d)		
3102	SS 11000le	Dana Octopus Squid, <i>Taningia danae</i>	Octopoteuthidae	A

TANZANIA**2011 September 7 (Shells)**

2626a	1700sh	Telescope Snail, <i>Telescopium telescopium</i>	Potamididae	A
2626b	1700sh	Arabian Tibia, <i>Tibia insulaechorab</i>	Strombidae	A
2626c	1700sh	South African Turban, <i>Turbo sarmaticus</i>	Turbinidae	A
2626d	1700sh	Horned Murex, <i>Bolinus cornutus</i>	Muricidae	A
2626	6800sh	MS of 4 (Sc#2626a–d)		
	Margin	L: U/I Shell (drawing)		U Z
2627	SS 3800sh	Crenulate Auger, <i>Oxymoris maculata</i>	Terebridae	A
	Margin	Top: U/I Shell (drawing)		U Z

TUVALU**2012 October 1 (Visit of Duke and Duchess of Cambridge)**

1232b	\$1.25	Episcopal Miter, <i>Mitra mitra</i> (Tuvalu Crest)	Mitridae	C
1232	\$6.25	MS of 5 (Sc#1232a–e)		
1233	SS \$3.50	Episcopal Miter, <i>Mitra mitra</i> (Tuvalu Crest)	Mitridae	C

WALLIS & FUTUNA ISLANDS**2012 April 17 (Corals)**

708a	10fr	Tabular Coral, <i>Acropora</i> sp.	Acroporidae	A
708b	30fr	Tabular Coral, <i>Acropora</i> sp.	Acroporidae	A
708c	40fr	Tabular Coral, <i>Acropora</i> sp.	Acroporidae	A
708d	55fr	Tabular Coral, <i>Acropora</i> sp.	Acroporidae	A
708	135fr	Horiz strip 4 (Sc#708a–d)		

2012 November 8 (Shells)

717a	5fr	U/I Shell		U A
717b	25fr	U/I Shell		U A
717c	35fr	U/I Shell		U A
717d	85fr	U/I Shell		U A
717	150fr	Horiz strip 4 (Sc#717a–d)		

DEEP OCEAN VAMPIRES

I find amusing the popularity of vampires in the current American entertainment culture. They are all so attractive. As comedian Mark Trenwith asked, “How do they do their hair and makeup so well when they can’t see themselves in the mirror?”

At the risk of bursting someone’s fantasy bubble, I would like to point out that the cinema vampires are fictitious, but there are vampires among other species.

On 2 October 2011, Sierra Leone issued two MS of four 5000Le stamps and two 11000Le SS depicting Deep Ocean Creatures. One of the MS stamps shows an image of a Vampire Squid, *Vampyroteuthis infernalis* Chun (Vampyroteuthidae). The scientific name for this creature translates to the “vampire squid from hell,” probably the greatest name for a species I have ever encountered.



The vampire squid has many unique characteristics that science has placed it in its own order (Vampyromorphida) and it shares similarities with both squids and octopuses. They are not actual vampires in that they do not subsist on the blood of humans, or anything else. They are, in fact, the only cephalopod that does not hunt living prey. Instead, they feed on detritus including the remains of zooplankton and other deep ocean creatures.

The squid grows only to a length of about 30cm. It gets its name from its cloak-like webbing and its red eyes, which are proportionately the largest in the animal kingdom at 2.5cm. This is a creature of extremes, living at depths up to 3,000 feet. To enable this, its metabolic rate is the lowest of all deep-sea cephalopods and its blood binds and transports oxygen better than any other.



HERPETOLOGY



Jack R. Congrove, BU1424

For the second issue in a row, I have put together a listing for this subject. I am sure some of our members have a more comprehensive listing that would be useful and informative. The information here is merely a regurgitation of the information in the Scott monthly update of new issues supplemented by some simple Internet searching. Please contact me if you can provide more complete and accurate data, and I will arrange an easy way for you to have it published in this column for the benefit of our other members.

Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
CAPE VERDE 2012 (Flora & Fauna of Santo Antão Protected Area)				
988	50e	Cape Verde Wall Gecko, <i>Tarentola caboverdiana caboverdiana</i>	Phyllodactylidae	A*
990	SS 100e	U/I sp.		
CHINA P. R. 2013 January 5 (New Year 2013: Year of the Snake)				
4061	\$1.20	Stylized snake		S
4061a	\$12	Bklt pane 10 (Sc#4061)		
CHRISTMAS ISLAND 2013 January 13 (New Year 2013: Year of the Snake)				
509	60c	Stylized snake		S
510	\$1.80	Chinese character for "snake"		S
510a	SS \$2.40	Sheet 2 (Sc#509–10)		
511	MS \$4.80	MS of 14 (Sc#509–10, 511a–l) (perf 14¾×14)		
511d	15c	Stylized snake with eggs		S
511m	\$3.95	Bklt pane 4 (Sc#511d, 511g, 2×Sc#510)		
511n	\$1.70	Bklt pane 4 (Sc#511i, 511j, 2×Sc#509)		
511o	\$1.70	Bklt pane 4 (Sc#511k, 511l, 2×Sc#509)		
511p	\$1.55	Bklt pane 4 (Sc#511a, 511h, 2×Sc#509)		
511q	\$1.55	Bklt pane 4 (Sc#511b, 511e, 2×Sc#509)		
511r	\$1.55	Bklt pane 4 (Sc#511c, 511f, 2×Sc#509)		
512	MS \$5.80	Sheet 13 (Sc#512a–m) (die cut 12¼) (s/a)		
512l	60c	Stylized snake (like Sc#509)		S
COCOS ISLANDS 2013 June 4 (50th anniv. Cocos Islands Postage Stamps)				
367	5c	Green Sea Turtle, <i>Chelonia mydas</i> (with diver)	Cheloniidae	A
371a	SS \$4.85	Sheet 5 (Sc#367–71)		
FRANCE 2013 January 4 (New Year 2013: Year of the Snake)				
4315	63c	Stylized snake (also exists in SS of 1)		S
2013 January 4 (Animals in Art)				
4326	(58c)	Stylized gold sculpture of snake		S
4327a	(696c)	Bklt pane 12 (Sc#4316–27)		
2013 February 4 (Animals Proverbs)				
4341	(58c)	Stylized (cry crocodile tears)		S
4343	(58c)	Stylized (to swallow snakes)		S
4349a	(696c)	Bklt pane 12 (Sc#4338–49)		

FRENCH POLYNESIA		2013 April 26 (Flora & Fauna)		
1097	40fr	U/I lizard		U
1098a	SS 250fr	Sheet 3 (Sc#1096–98)		
FRENCH SOUTHERN & ANTARCTIC TERR.		2013 April 29 (Emblem Silhouettes)		
484	1c	Green Sea Turtle, <i>Chelonia mydas</i> (silhouette)	Cheloniidae	S
488	63c	same as above with other silhouettes in set		S
GIBRALTAR		2013 September 14 (Endangered Animals Type of 2011)		
1408	42p	Chinese Alligator, <i>Alligator sinensis</i>	Alligatoridae	A*
1410	42p	Leatherback Sea Turtle, <i>Dermochelys coriacea</i>	Dermochelyidae	A*
1410a		SS of 6 (Sc#1405–10)		
HONG KONG		2013 March 28 (Children & Pets)		
1566	\$2.40	Stylized tortoise		S
1569a	SS \$16.10	Sheet 6 (Sc#1564–69 se-tenant)		
HUNGARY		2013 June 20 (Sándor Weöres, writer)		
4288b	110fo	Stylized frog playing flute		S
4288	440+100fo	Sheet 4 (Sc#4288a–d se-tenant) (surtax for support of youth philately)		
INDONESIA		2013 January 22 (New Year 2013: Year of the Snake)		
2330a	2500r	U/I snake sp.		U A*
2330b	5000r	U/I snake sp.		U A*
2330c	7500r	U/I snake sp.		U A*
2330d	MS 30000r	Sheet 6 (2×Sc#2330a–c)		
2330	15000r	Strip 3 (Sc#2330a–c)		
2331	SS 10000r	U/I snake sp.		U A*
		2013 May 1 (50th anniv. Transfer of West Irian to Indonesia)		
2346b	2500r	Stylized ???		S
2346	7500r	Strip 3 (Sc#2346a–c)		
ISRAEL		2012 December 12 (Wildlife Conservation)		
1960a	3s	Mediterranean Spur-thighed Tortoise, <i>Testudo graeca</i>	Testudinidae	A*
1960	9s	Strip 3 (Sc#1960a–c)		
ITALY		2013 January 12 (Folk Festivals)		
3162	60c	Stylized ???		S
KAZAKHSTAN		2013 April 25 (Lunar Calendar Animals)		
698f	100t	U/I snake sp.		U A*
698	MS 1200t	Sheet 12 (Sc#698a–l)		
NICARAGUA		2012 September 6 (San Juan River)		
2533c	5C	American Crocodile, <i>Crocodylus acutus</i>	Crocodylidae	A*
2533d	10C	Black Spiny-tailed Iguana, <i>Ctenosaura similis</i>	Iguanidae	A*
2533		MS of 6 (Sc#2533a–f)		
ST. THOMAS & PRINCE ISLANDS		2010 September 2		
2317b	20000d	Jamaican Boa, <i>Epicrates subflavus</i> (Jamaica Sc#594 s-o-s)	Boidae	B*
2317d	25000d	Nile Crocodile, <i>Crocodylus niloticus</i> (Gambia Sc#516 s-o-s)	Crocodylidae	B*
2317		MS of 5 (Sc#2317a–e) (WWF s-o-s)		
2324	SS 100000d	Margin: Green Sea Turtle, <i>Chelonia mydas</i>	Cheloniidae	Z
2327	SS 110000d	Aldabra Tortoise, <i>Aldabrachelys gigantea</i> (Z.E.S. Sc#108 s-o-s)	Testudinidae	B*

ST. THOMAS & PRINCE ISLANDS (continued)

2335f	25000d	U/I snake			A
2335		MS of 6 (Sc#2335a–f) (Chinese Zodiac)			

2010 December 1

2347d	20000d	Stylized on 50d coin			S
2347		MS of 6 (Sc#2347a–f) (Coins)			

THAILAND**2013 January 1** (New Year 2013: Year of the Snake)

2716	3b	Stylized cobra snake			S
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TURKS & CAICOS ISLANDS**2013 July 12** (New Year 2013: Year of the Snake)

1513a	\$1.25	Turks Island Boa, <i>Chilabothrus chrysogaster</i> (tail)	Boidae		A
1513b	\$1.25	Turks Island Boa, <i>Chilabothrus chrysogaster</i> (head)	Boidae		A
1513		Horiz pair (Sc#1513a–b)			
1514	SS \$3.50	Turks Island Boa, <i>Chilabothrus chrysogaster</i>	Boidae		A

URUGUAY**2013 April 11** (Patient Safety Day)

2427	15p	Stylized snake (Rod of Asclepius)			S
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VIETNAM**2012 December 1** (New Year 2013: Year of the Snake)

3464	2000d	Stylized snake with flowers			S
3465	10500d	Stylized snake with flowers			S

TURKS & CAICOS SNAKES

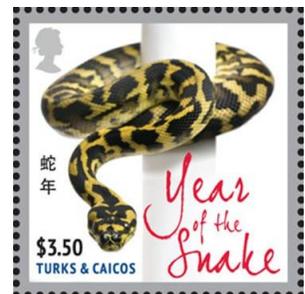
Because 2013 is the Year of the Snake in the Chinese calendar, we have had a plethora of snake issues this year. The majority of these issues show highly stylized and even cartoonish images.

That is all fine and many designs are very artistic and appealing, but we are dealing with Biology in this study unit, so I want to highlight one of the few issues that shows an actual native species in an attractive design using natural colors.

On 12 July 2013, the Turks and Caicos Islands issued a set of two stamps and a SS to commemorate the Year of the Snake. These stamps show the Turks Island Boa, *Chilabothrus chrysogaster* Cope (Boidae). This species is found in both the southern Bahamas and the Turks and Caicos Islands. They are nocturnal and feed on lizards, birds, and rodents, which makes them good pest controllers.

Adults can reach a length of more than 70 inches, but typically they are closer to three feet in length. This species has three color morphs: spotted, striped, and no-pattern. The spotted version seems to be the most common, followed by striped. The no-pattern snakes, which are mostly solid gray with a few dark markings, are very rare. Juveniles are orange or red and long and thin. Rarely, some adults may retain the juvenile coloration.

These snakes are threatened by introduced predators such as cats, misguided human persecution, and loss of habitat.





ENTOMOLOGY

Editor

Donald P. Wright, Jr., BU243



New Listings

Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	
AUSTRALIA 2013 April 2 (Baby Animals)				
3889	\$1.70	INSECT (with kookaburra)		C
3890	\$1.75	INSECT (with wombat)		C
3891	\$2.60	INSECT (with echidna)		C
3892	\$4.65	INSECT (with platypus)		C
3893	\$6.45	INSECT (with possum)		C
3894	\$1.70	Like Sc#3889 bklt s/a		C
3895	\$1.75	Like Sc#3890 bklt s/a		C
3896	\$2.60	Like Sc#3891 bklt s/a		C
BELGIUM 2013 September 2013 (Good Luck Symbols) (Block of 4 s/t)				
	(67c)	Stylized LADYBUG	Coccinellidae	S
BRAZIL 2013 June 5 (Brazilian Ants)				
a	(1.10r)	Weaver Ant, <i>Camponotus senex</i> Smith	FOR, Formicinae	A
b	(1.10r)	Trap Jaw Ant, <i>Odontomachus bauri</i> Emery	FOR, Ponerinae	A
c	(1.10r)	Leaf-cutter Ant, <i>Atta sexdens</i> L.	FOR, Myrmicinae	A
d	(1.10r)	Fire Ant, <i>Solenopsis saevissima</i> Smith	FOR, Myrmicinae	A
CANADA 2013 July 5 (Children's Literature)				
2652a	(63c)	Stylized INSECT (Stella hanging from tree)		S
2652b	(63c)	Stylized INSECT (Stella with brother)		S
		Sheet of 2 (Sc#2652a-b) (perf 12½)		
2653	(63c)	Like Sc#2652a (die cut, s/a)		S
2654	(63c)	Like Sc#2652b (die cut, s/a)		S
		Bklt pane 10 (5ea Sc#2653-54)		
CENTRAL AFRICA 2013 March 25 (Flowers, Birds, & Butterflies) (Stamperija)				
	SS 2650fr	Margin UL: <i>Euphaedra</i> sp.	NYM, Limenitidinae	Z
2013 March 25 (s-o-s) (Stamperija)				
a	750fr	Olive Bee Hawkmoth, <i>Hemaris croatica</i> Esper (Croatia Sc#848d) MS of 4 s/t	SPH, Macroglossinae	A
2013 March 25 (Insects) (Stamperija)				
a	900fr	Ajax Swallowtail, <i>Protographium marcellus</i> Cramer	PAP, Papilioninae	A
b	900fr	Sawyer Beetle, <i>Macrodonia cervicornis</i> L.	CER, Prioninae	A
c	900fr	Jungle Nymph, <i>Heteropteryx dilatata</i> Parkinson	Heteropterygidae, Heteropteryginae	A
d	900fr	Death's Head Moth, <i>Acherontia atropos</i> L.	SPH, Sphinginae	A
		MS of 4 s/t		
	Margin	UL: Great Green Bush Cricket, <i>Tettigonia viridissima</i> L.	TET, Tettigoniinae	Z
		LR: Great Diving Beetle, <i>Dytiscus marginalis</i> L.	DYT, Dytiscinae	Z
		LL: Chan's Megastick, <i>Phobaeticus chani</i> Bragg	Phasmatidae, Clitumninae	Z

CENTRAL AFRICA (continued)

SS 3000fr	Western Honeybee, <i>Apis mellifera</i> L.	API, Apinae	A
Margin	UL: Monarch, <i>Danaus plexippus</i> L.	NYM, Danainae	Z
	ML: Giant Dead Leaf Mantis, <i>Deroplatys desiccata</i> Beier	MAN, Deroplatyinae	Z
	LL: Ladybird Beetle, <i>Coccinella magnifica</i> Redtenbacher	Coccinellidae	Z
	UR: Death's Head Moth, <i>Acherontia atropos</i> L.	SPH, Sphinginae	Z

CHAD**2013** (Butterflies) (Stamperija)

a	5000fr	Plain Tiger, <i>Danaus chrysippus</i> L. (with larva)	NYM, Danainae	A
b	5000fr	Christmas Butterfly, <i>Papilio demodocus</i> Esper (with larva)	PAP, Papilioninae	A
		MS of 2 (a & b) s/t (gold foil) (reduced images of each butterfly are in the sheet corners)		
SS 5000fr		Plain Tiger, <i>Danaus chrysippus</i> L. (with larva) (gold foil)	NYM, Danainae	A
Margin		UR: African Veined White, <i>Belenois gidica</i> Godart	PIE, Pierinae	Z
		LR: African Migrant, <i>Catopsilia florella</i> Fabr. (with larva)	PIE, Pierinae	Z
SS 5000fr		Christmas Butterfly, <i>Papilio demodocus</i> Esper (with larva)	PAP, Papilioninae	A
Margin		UL: Blue-Spotted Arab, <i>Colotis phisadia</i> Godart	PIE, Pierinae	Z
		UR: Zebra White, <i>Pinacopteryx eriphia</i> Godart	PIE, Pierinae	Z
		LR: Orange Acraea, <i>Acraea eponina</i> Cramer	NYM, Heliconiinae	Z
		SS of 2 (a & b)		
Margin		UL: Sulphur Orange Tip, <i>Colotis aurora</i> Cramer (with larva)	PIE, Pierinae	Z
		Top: Crimson Tip, <i>Colotis danae</i> Fabr.	PIE, Pierinae	Z
		UR: Apricot Playboy, <i>Deudorix dinochares</i> G.-Smith	LYC, Theclinae	Z
		LR: Spio Grizzled Skipper, <i>Spialia spio</i> L.	HESP, Pyrginae	Z

CHINA P. R.**2013 January 5** (New Year 2013: Year of the Snake)

4061	\$1.20	Stylized BUTTERFLY in snake design	Lepidoptera	S
4061a		Bklt pane of 10 (Sc#4061)		

2013 April 13 (Painting: Women Producing Silk)

4086–88	\$1.20	Silk from Silkworm, <i>Bombyx mori</i> L. (ptg details—no insect)	Bombycidae	R
4089	SS \$6	Silk from Silkworm, <i>Bombyx mori</i> L. (entire ptg)	Bombycidae	R

CHRISTMAS ISLAND**2013 January 13** (New Year Type of 2008–12)

511a	15c	Stylized BUTTERFLY (with rat & apples)		S
511c	15c	Stylized INSECT (with dragon & tomatoes)		S
511h	20c	Stylized INSECT (with boar & spinach)		S
511l	25c	Stylized BUTTERFLY (with dog & milk bottles)		S
511		MS of 14 (Sc#509–10, 511a–l) (perf 14¾×14)		
511o		Bklt pane 4 (Sc#511k, 511l, 2ea 509)		
511p		Bklt pane 4 (Sc#511a, 511h, 2ea 509)		
511r		Bklt pane 4 (Sc#511c, 511f, 2ea 509)		
512b	20c	Like Sc#511h		S
512f	25c	Like Sc#511l		S
512g	50c	Like 511a with purple foil		S
512k	60c	Like 511c with purple foil		S
512		MS of 13 (Sc#512a–m) (die cut 12¼) (s/a)		

CONGO (Democratic Republic)**2012 April 1** (Beetles & Flowers) (Stamperija)

Set of four single stamps each also in SS of one plus SS containing all four.

a	300fr	<i>Aphelorrhina</i> sp.	SCA, Cetoniinae	A
SS 300fr		UL: Centaur Beetle, <i>Archon centaurus</i> Fabr.	SCA, Dynastinae	Z
		UR: <i>Aphelorrhina</i> sp.	SCA, Cetoniinae	Z
		LR: <i>Ranzania bertolonii</i> Lucas	SCA, Cetoniinae	Z

CONGO (Democratic Republic) (continued)

b	300fr	<i>Chelorrhina</i> sp.	SCA, Cetoniinae	A
	SS 300fr	UL: BEETLE	Cerambycidae	Z
		UR: BEETLE		Z
		LR: <i>Chelorrhina</i> sp.	SCA, Cetoniinae	Z
c	300fr	<i>Compscephalus</i> sp.	SCA, Cetoniinae	A
	SS 300fr	UL: <i>Compscephalus</i> sp.	SCA, Cetoniinae	Z
		Top: BEETLE	Scarabaeidae	Z
		LR: Goliath Beetle, <i>Goliathus goliatus</i> Drury	SCA, Cetoniinae	Z
d	300fr	<i>Taurhina stanleyi</i> Janson. (Cap: <i>Neptunides</i>)	SCA, Cetoniinae	A
	SS 300fr	UL: <i>Ranzania bertolonii</i> Lucas	SCA, Cetoniinae	Z
		UR: <i>Taurhina stanleyi</i> Janson	SCA, Cetoniinae	Z
		LR: <i>Stephanorrhina princeps bamptoni</i> Allard	SCA, Cetoniinae	Z
	SS 4×300fr	SS of 4 (#a–d) s/t		
	Margin:	UR: <i>Amaurodes passerini nyanzanus</i> Burgeon	SCA, Cetoniinae	Z
		MR: <i>Conradtia principalis</i> Kolbe	SCA, Cetoniinae	Z
		LR: <i>Cheirolasia burkei</i> Schuroff	SCA, Cetoniinae	Z

2012 (Butterflies & Moths) (Stamperija)

Set of four single stamps each also in SS of one plus SS containing all four.

a	1000fr	Fiery Acraea, <i>Acraea acrita</i> Hewitson (with larva)	NYM, Heliconiinae	A
	SS 1000fr	UR: Oleander Hawkmoth, <i>Daphnis nerii</i> L. (larva)	SPH, Macroglossinae	Z
		MR: Same (adult)	SPH, Macroglossinae	Z
		LR: Plain Tiger, <i>Danaus chrysippus</i> L. (larva)	NYM, Danainae	Z
		LL: Same (adult)	NYM, Danainae	Z
b	1000fr	African Moon Moth, <i>Argema mimosae</i> Boisduval (with larva)	SAT, Saturniinae	A
	SS 1000fr	UR: Roseate Emperor, <i>Euchroa trimeni</i> Felder (larva)	SAT, Saturniinae	Z
		MR: Same (adult)	SAT, Saturniinae	Z
		LR: Cat's Eye Emperor, <i>Aurivillius arata</i> Westwood (larva)	SAT, Saturniinae	Z
		LL: Same (adult)	SAT, Saturniinae	Z
c	1000fr	Puss Moth, <i>Cerura vinula</i> L. (with larva)	NOT, Stauropinae	A
	SS 1000fr	UR: Ducal Princeling, <i>Vegetia ducalis</i> Jordan (larva)	SAT, Saturniinae	Z
		MR: Same (adult)	SAT, Saturniinae	Z
		LR: White-ringed Atlas, <i>Epiphora mythimnia</i> Westwood (adult)	SAT, Saturniinae	Z
		LL: Same (larva)	SAT, Saturniinae	Z
d	1000fr	Mopane Moth, <i>Gonimbrasia belina</i> Westwood (with larva)	SAT, Saturniinae	A
	SS 1000fr	UL: <i>Nudaurelia dione</i> Fabr. (larva)	SAT, Saturniinae	Z
		LR: Same (adult)	SAT, Saturniinae	Z
		MR: <i>Imbrasia obscura</i> Butler (larva)	SAT, Saturniinae	Z
		LL: Same (adult)	SAT, Saturniinae	Z
	SS 4×1000fr	SS of 4 (#a–d) s/t		
	Margin	UR: Variable Prince, <i>Holocerina smilax</i> Westwood (larva)	SAT, Ludiinae	Z
		UMR: Same (adult)	SAT, Ludiinae	Z
		LMR: Common Emperor, <i>Bunaea alcinoe</i> Stoll (adult)	SAT, Saturniinae	Z
		LR: Same (larva)	SAT, Saturniinae	Z

2012 (Chameleons) (Stamperija)

(1)	SS 450fr	MR: Convolvulus Hawkmoth, <i>Agrius convolvuli</i> L.	SPH, Sphinginae	Z
(2)	SS 450fr	MR: Old World Swallowtail, <i>Papilio machaon</i> L.	PAP, Papilioninae	Z
	SS 2×450fr	LR: Veined Orange, <i>Colotis vesta</i> Reiche	PIE, Pierinae	Z

2012 (Bird: *Ardea goliath*) (Stamperija)

	SS 500fr	LR: Scarlet Darter, <i>Crocothemis erythraea</i> Brullé	LIB, Sympetrinae	Z
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CONGO (People's Republic)**2011 (Butterflies of the World) (Stamperija)**

a	200fr	Common Opal, <i>Chrysoritis thysbe</i> L.	LYC, Theclinae	A
b	200fr	Azure Hairstreak, <i>Hemiolaus caeculus</i> Hopffer	LYC, Theclinae	A
c	200fr	Acraea Mimic, <i>Mimacraea marshalli</i> Trimen	LYC, Poritiinae	A
d	200fr	Grass Jewel, <i>Chilades trochylus</i> Freyer	LYC, Polyommatae	A
e	200fr	Foxy Charaxes, <i>Charaxes jasius</i> L.	NYM, Charaxinae	A
f	200fr	Large Blue Charaxes, <i>Charaxes bohemani</i> Felder	NYM, Charaxinae	A
g	200fr	Blue Diadem, <i>Hypolimnias salmactis</i> Drury	NYM, Nymphalinae	A
h	200fr	Forest Mother-of-Pearl, <i>Salamis parhassus</i> Drury	NYM, Nymphalinae	A
i	200fr	Southern Small White, <i>Pieris mannii</i> Mayer	PIE, Pierinae	A
j	200fr	Dark Grayling, <i>Pseudochazara mniszecii</i> Herrich-Schaeffer	NYM, Satyrinae	A
k	200fr	Mountain Clouded Yellow, <i>Colias phicomone</i> Esper	PIE, Coliadinae	A
l	200fr	Southern Hermit, <i>Chazara prieuri</i> Pierret	NYM, Satyrinae	A
m	200fr	Southern Comma, <i>Nymphalis egea</i> Cramer	NYM, Nymphalinae	A
n	200fr	Dark Green Fritillary, <i>Speyeria aglaja</i> L.	NYM, Heliconiinae	A
o	200fr	Large White, <i>Pieris brassicae</i> L.	PIE, Pierinae	A
p	200fr	Chapman's Ringlet, <i>Erebia palarica</i> Chapman	NYM, Satyrinae	A
q	200fr	Small Apollo, <i>Parnassius phoebus</i> Fabr.	PAP, Parnassiinae	A
r	200fr	Dil's Grayling, <i>Pseudochazara orestes</i> de Prins & Van der Poorten	NYM, Satyrinae	A
s	200fr	Cabbage White, <i>Pieris rapae</i> L.	PIE, Pierinae	A
t	200fr	Eurasian Comma, <i>Nymphalis c-album</i> L.	NYM, Nymphalinae	A

MS of 20 (#a-t)

a	200fr	African Giant Skipper, <i>Pyrrhochalcia iphis</i> Drury	HES, Coeliadinae	A
b	200fr	Giant Blue Swallowtail, <i>Papilio zalmoxis</i> Hewitson	PAP, Papilioninae	A
c	200fr	Mocker Swallowtail, <i>Papilio dardanus</i> Brown	PAP, Papilioninae	A
d	200fr	Blue-green Reflector, <i>Doxocopa laurentia cherubina</i> C&R Felder	NYM, Apaturinae	A
e	200fr	African Giant Swallowtail, <i>Papilio antimachus</i> Drury	PAP, Papilioninae	A
f	200fr	Christmas Butterfly, <i>Papilio demodocus</i> Esper	PAP, Papilioninae	A
g	200fr	Common Dotted Border, <i>Mylothris chloris</i> Fabr.	PIE, Pierinae	A
h	200fr	Geoffroy's Snout, <i>Libythea geoffroy</i> Godart	NYM, Libytheinae	A
i	200fr	African Migrant, <i>Catopsilia florella</i> Fabr.	PIE, Coliadinae	A
j	200fr	Natal Barred Blue, <i>Cigaritis natalensis</i> Westwood	LYC, Theclinae	A
k	200fr	Protea Scarlet, <i>Capys alphaeus</i> Cramer	LYC, Theclinae	A
l	200fr	Southern Snout, <i>Libytheana carinenta</i> Cramer	NYM, Libytheinae	A
m	200fr	Pirate, <i>Catacroptera cloanthe</i> Cramer	NYM, Nymphalinae	A
n	200fr	The Chief, <i>Amauris echeria</i> Stoll	NYM, Danainae	A
o	200fr	Rusty-tipped Page, <i>Siproeta epaphus</i> Latreille	NYM, Nymphalinae	A
p	200fr	African Monarch, <i>Danaus chrysippus</i> L.	NYM, Danainae	A
q	200fr	Napoleon Butterfly, <i>Dynastor napoleon</i> Doubleday	NYM, Morphinae	A
r	200fr	Saturn, <i>Zeuxidia amethystus</i> Butler	NYM, Morphinae	A
s	200fr	Royal Assyrian, <i>Terinus terpander</i> Hewitson	NYM, Heliconiinae	A
t	200fr	Hewitson's Pierella, <i>Pierella hyceta</i> Hewitson	NYM, Satyrinae	A

MS of 20 (#a-t)

2013 (Butterflies Part V) (Stamperija)

a	400fr	Rusty Daggerwing, <i>Marpesia petreus</i> Bates	NYM, Cyrestinae	A
b	400fr	Rusty-tipped Page, <i>Siproeta epaphus</i> Latreille	NYM, Nymphalinae	A
c	400fr	Malachite, <i>Siproeta stelenes biplagiata</i> Fruhstorfer	NYM, Nymphalinae	A
d	400fr	Banded Owl, <i>Caligo atreus dionysos</i> Fruhstorfer	NYM, Morphinae	A

MS of 4 (#a-d) s/t

COOK ISLANDS		2013 (Entomology) (MS of 20)		
30c	Lesser Mealworm, <i>Alphitobius diaperinus</i> Panzer		TEN, Tenebrioninae	A
50c	Red or Soapberry Bug, <i>Leptocoris rufomarginatus</i> Fabr.		Rhopalidae, Serinethinae	A
70c	<i>Nabis capsiformis</i> Germar		Nabidae, Nabinae	A
\$1	Dark-waist Paper Wasp, <i>Polistes jokahamae</i> Radoszkowski		VES, Polistinae	A
\$1.30	Sweet Potato Hawkmoth, <i>Agrius convolvuli</i> L.		SPH, Sphinginae	A
\$1.50	<i>Harmonia octomaculata</i> Fabr.		COC, Epilachninae	A
\$1.70	Banana Root Borer, <i>Cosmopolites sordidus</i> Germar	Dryophthoridae, Orthognathinae		A
\$3.80	Coconut Stick Insect, <i>Graeffea crouanii</i> LeGuillou ♀	Platycranidae		A
\$4.10	<i>Leptoglossus australis</i> Fabr.	COR, Coreinae		A
\$5.30	Southern Green Stink Bug, <i>Nezara viridula</i> L. var. <i>viridula</i> L.	PEN, Pentatominae		A
\$6.50	(Spider) <i>Neoscona theisi</i> Walckenaer	Araneidae, Araneinae		A
\$8.50	Coral-tailed Cloudwing (Twister), <i>Tholymis tillarga</i> Fabr.	LIB, Trameinae		A
CZECH REPUBLIC		2013 June 26 (Franz Kafka)		
E	Stylized Colorado Potato Beetle, <i>Leptinotarsa decemlineata</i> Say	CHR, Chrysomelinae		S
FRANCE		2013 April 19 (Bats)		
4384	SS 301c SS of 4 (Sc#4383 & Sc#4284a-c)			
	Margin LL: U/I MOTH larva			U Z
	MR: U/I MOTH	SAT, Saturniinae		U Z
GREAT BRITAIN (Jersey)		2013 July 4 (Dragonflies & Damselflies)		
25p	Beautiful Demoiselle, <i>Calopteryx virgo</i> L.	CAL, Calopteryginae		A
55p	Golden-ringed Dragonfly, <i>Cordulegaster boltonii</i> Donovan	CORD, Cordulegastrinae		A
60p	Dainty Damselfly, <i>Coenagrion scitulum</i> Rambur	COE, Coenagrioninae		A
68p	Large Red Damselfly, <i>Pyrrhosoma nymphula</i> Sulzer	COE, Coenagrioninae		A
80p	Willow Emerald Damselfly, <i>Chalcolestes viridis</i> Van der Linden	Lestidae, Lestinae		A
88p	Scarlet Darter, <i>Crocothemis erythraea</i> Brullé	LIB, Sympetrinae		A
		2013 September 20 (Jersey Cows)		
Europe	Stylized BUTTERFLIES (with cow)	Lepidoptera		S
GRENADA		2013 January 3 (Heliconius Mimicry)		
3881a	\$3.50 <i>Melinaea</i> sp.	NYM, Heliconiinae		A
	Top: <i>Heliconius aristonae</i> Hewitson	NYM, Heliconiinae		B
	LL & LR: <i>Heliconius xenoclea</i> Hewitson	NYM, Heliconiinae		B
	Bot: <i>Heliconius quitalea</i> Hewitson	NYM, Heliconiinae		B
3881b	\$3.50 Caribbean Buckeye, <i>Junonia evarete</i> Cramer	NYM, Nymphalinae		A
	UL & UR: <i>Actinote laverna</i> Doubleday	NYM, Heliconiinae		B
	ML & MR: U/I BUTTERFLY	NYM		U B
	LL & LR: U/I BUTTERFLY	NYM		U B
	Top & Bot: U/I BUTTERFLY	NYM		U B
3881c	\$3.50 Red Passion Flower, <i>Heliconius erato petiverana</i> Dbldy. & Hew.	NYM, Heliconiinae		A
	UL & UR: <i>Heliconius heurippe</i> Hewitson	NYM, Heliconiinae		B
	LL & LR: <i>Heliconius hecalesia</i> Hewitson	NYM, Heliconiinae		B
	Top: <i>Heliconius hermathena</i> Hewitson	NYM, Heliconiinae		B
3881d	\$3.50 Gulf Fritillary, <i>Agraulis vanillae</i> L.	NYM, Heliconiinae		B
	UL & UR: U/I BUTTERFLY	NYM		U B
	LL & LR: U/I BUTTERFLY	NYM, Satyrinae		U B
	Top & Bot: U/I BUTTERFLY	NYM, Satyrinae		U B
3881	MS of 4 (Sc#3881a-d)			
Margin	LR: <i>Bematistes elongata</i> Butler	NYM, Heliconiinae		Z
	LL: U/I BUTTERFLY	NYM		U Z

GRENADA (continued)

3882	\$9	White Peacock, <i>Anartia jatrophae</i> Johansson	NYM, Nymphalinae	A
		UL & UR: Fig-eater Butterfly, <i>Euphaedra xypete</i> Hewitson	NYM, Limenitidinae	B
		LL & LR: <i>Bebearia</i> sp.	NYM, Limenitidinae	B
		Top: <i>Euphaedra</i> sp.	NYM, Limenitidinae	B
		Bot: U/I BUTTERFLY	NYM	U B
Margin		Bot: U/I BUTTERFLY	NYM	U Z

GUINEA**2013 April 30** (Scouts & Butterflies) (Stamperija)

	10000fr	Amethyst Blue, <i>Zizeeria knysna</i> Trimen	LYC, Polyommatae	B
	15000fr	New Guinea Birdwing, <i>Troides priamus poseidon</i> Doubleday ♀	PAP, Papilioninae	B
	20000fr	Common Blue Bottle, <i>Graphium sarpedon</i> L.	PAP, Papilioninae	B
		MS of 3 s/t		
SS	40000fr	<i>Graphium aristeus</i> Stoll	PAP, Papilioninae	B
Margin:		Top: U/I BUTTERFLY	Lepidoptera	U Z

2013 May 31 (Ants) (Stamperija)

a	15000fr	<i>Formica sanguinea</i> Latreille	FOR, Formicinae	A
b	15000fr	<i>Atta colombica</i> Guérin-Ménéville	FOR, Myrmicinae	A
c	20000fr	Meat Ant, <i>Iridomyrmex purpureus</i> Smith	FOR, Dolichoderinae	A
		MS of 3 (#a-c)		
Margin		Top: Column of ANTS	FOR	Z
		LL: ANTS embedded amber	FOR	Z
		LR: Black Carpenter Ant, <i>Camponotus pennsylvanicus</i> De Geer	FOR, Formicinae	Z
SS	45000fr	<i>Formica sanguinea</i> Latreille	FOR, Formicinae	A
Margin		LL: Weaver Ant, <i>Oecophylla smaragdina</i> Fabr.	FOR, Formicinae	Z
		MR: Meat Ant, <i>Iridomyrmex purpureus</i> Smith	FOR, Dolichoderinae	Z
		LR: <i>Formica sanguinea</i> Latreille	FOR, Formicinae	Z

2013 May 31 (Butterflies) (Stamperija)

a	15000fr	Zebra Longwing, <i>Heliconius charithonia</i> L.	NYM, Heliconiinae	A
b	15000fr	Rusty-tipped Page, <i>Siproeta epaphus</i> Latreille	NYM, Nymphalinae	A
c	20000fr	Leopard Lacewing, <i>Cethosia cyane</i> Drury (with larva)	NYM, Heliconiinae	A
		MS of 3 (#a-c)		
Margin		LL: Blue Morpho, <i>Morpho menelaus</i> L. (Cap: <i>Papilio achilles</i>)	NYM, Morphinae	Z
		LR: Julia, <i>Dryas iulia</i> Fabr. (Cap: <i>Ariadne merione</i>)	NYM, Heliconiinae	Z
a	15000fr	Common Castor, <i>Ariadne merione</i> Cramer (with larva)	NYM, Biblidinae	A
b	15000fr	Common Buckeye, <i>Junonia coenia</i> Hübner	NYM, Nymphalinae	A
c	20000fr	Julia, <i>Dryas iulia</i> Fabr.	NYM, Heliconiinae	A
		MS of 3 (#a-c)		
Margin		LL: Rusty-tipped Page, <i>Siproeta epaphus</i> Latreille (larva)	NYM, Nymphalinae	Z
		Bot: Common Mormon, <i>Papilio polytes</i> L.	PAP, Papilioninae	Z
SS	45000fr	L & Bot: Question Mark, <i>Nymphalis interrogationis</i> Fabr.	NYM, Nymphalinae	A
		R: Old World Swallowtail, <i>Papilio machaon</i> L. (larva)	PAP, Papilioninae	A
Margin		CTR: Old World Swallowtail, <i>Papilio machaon</i> L. (adult)	PAP, Papilioninae	Z
		Bot: Blue Pansy, <i>Junonia orithya</i> L.	NYM, Nymphalinae	Z
SS	45000fr	L & R: New Guinea Birdwing, <i>Troides priamus</i> L.	PAP, Papilioninae	A
Margin		ML: <i>Danis melimnos</i> Druce & Bethune-Baker	LYC, Polyommatae	Z
		LL: Monarch, <i>Danaus plexippus</i> L.	NYM, Danainae	Z

GUINEA (continued)		2013 May 31 (Beetles) (Stamperija)		
a	15000fr	Flower Chafer Beetle, <i>Chiloloba acuta</i> Wiedemann	SCA, Cetoniinae	A
b	15000fr	Hercules Beetle, <i>Dynastes hercules</i> L. (with larva)	SCA, Dynastinae	A
c	20000fr	Dung Beetle, <i>Onthophagus coenobita</i> Herbst	SCA, Scarabaeinae	A
		MS of 3 (#a–c)		
	Margin	LL: Hercules Beetle, <i>Dynastes hercules</i> L.	SCA, Dynastinae	Z
		Bot: Ten-lined June Beetle, <i>Polyphylla decemlineata</i> Say ♀	SCA, Melolonthinae	Z
		LR: Ten-lined June Beetle, <i>Polyphylla decemlineata</i> Say ♂	SCA, Melolonthinae	Z
	SS 45000fr	L: Earth-boring Dung Beetle	Geotrupidae	A
		R: Five-horned Rhinoceros Beetle, <i>Eupatorus gracilicornis</i> Arrow	SCA, Scarabaeinae	A
	Margin	LL: Stag Beetle	Lucanidae	Z
		LR: Hide Beetle	Trogidae	Z
GUINEA-BISSAU		2013 June 3 (Endangered Butterflies) (Stamperija)		
a	750fr	U/I BUTTERFLY	Lepidoptera	U
b	750fr	U/I BUTTERFLY	Lepidoptera	U
c	750fr	U/I BUTTERFLY	Lepidoptera	U
d	750fr	U/I BUTTERFLY	Lepidoptera	U
		MS of 4 (#a–d)		
	SS 2900fr	U/I BUTTERFLY	Lepidoptera	U
GUYANA		2013 April 29 (New Year 2013: Year of the Snake)		
a	\$80	Calligraphic images of BUTTERFLIES, fish, & buildings	Lepidoptera	S
		2013 April 29 (Butterflies)		
a	\$200	Pipevine Swallowtail, <i>Battus philenor orsua</i> Godman & Salvin	PAP, Papilioninae	A
b	\$200	<i>Dismorphia eunoe desine</i> Hewitson	PIE, Dismorphiinae	A
c	\$200	Haitian Mimic, <i>Dismorphia spio</i> Godart	PIE, Dismorphiinae	A
d	\$200	<i>Lienix viridifascia</i> Butler	PIE, Dismorphiinae	A
e	\$200	<i>Lyropteryx lyra cleadas</i> Druce	Riodinidae	A
f	\$200	Chiricahua Pine White, <i>Neophasia terlooii</i> Behr	PIE, Pierinae	A
		MS of 6 (#a–f)		
IRAQ		2013 September 4 (Butterflies)		
	200d	Orange Tip, <i>Anthocharis cardamines</i> L.	PIE, Pierinae	A
	250d	Blue Pansy, <i>Precis orithya</i> L.	NYM, Nymphalinae	A
	500d	White Glider, <i>Ganyra phaloe sublineata</i> Schaus	PIE, Pierinae	A
	750d	Clouded Yellow, <i>Colias croceus</i> Fourcroy, ♂	PIE, Coliadinae	A
	1000d	Old World Swallowtail, <i>Papilio machaon</i> L.	PAP, Papilioninae	A
	5000d	Red Admiral, <i>Vanessa atalanta</i> L.	NYM, Nymphalinae	A
	10000d	Plain Tiger, <i>Danaus chrysippus</i> L.	NYM, Danainae	A
ITALY		2013 June 7 (550th Anniversary of San Marino Borders)		
	70c	INSECT & map		C
KENYA		2011 November 16 (Correction)		
856b	95sh	<i>Trirhithrum culcasiae</i> White & Copeland	TEP, Dacinae	A
LIBYA		2013 May 4 (International Letter Writing) (Envelope & Raindrop)		
	1000dh	L: U/I BUTTERFLY	PIE	C
		M: U/I BUTTERFLY	PAP	C
		R: Painted Lady, <i>Vanessa cardui</i> L.	NYM, Nymphalinae	C
		2013 June 17 (Combating Desertification)		
	500dh	Monarch, <i>Danaus plexippus</i> L. (hand holding plant)	NYM, Danainae	B

MARSHALL ISLANDS**2012 June 18** (Birds of the Pacific) (Correction)1034j 45c Mimic, *Hypolimnas misippus* L. ♀ NYM, Nymphalinae C**MOLDOVA****2013 July 5** (Exotic Butterflies in Natural History Museum)

1L Ghost Moth, White Witch, *Thysania agrippina* Cramer NOC, Calpinae A
 1.75L Green Swallowtail, *Papilio blumei* Boisduval PAP, Papilioninae A
 1.75L Blue Salamis, *Salamis temora* C&R Felder NYM, Nymphalinae A
 5.75L Scalloped Red Glider, *Cymothoe excelsa* Neustetter NYM, Limenitidinae A
 MS of 8 (2ea of above+label)
 Label Blue Salamis, *Salamis temora* C&R Felder NYM, Nymphalinae B

MOZAMBIQUE**2013 June 25** (Scouting) (Stamperija)

c 92m Peacock, *Nymphalis io* L. NYM, Nymphalinae B
 d 92m Common Brown, *Heteronympha merope* Fabr. NYM, Satyrinae B
 MS of 4 (#a-d)
 SS 175m Scout on a bike
 Margin UL: Cabbage Butterfly, *Pieris rapae* L. PIE, Pierinae Z
 ML: *Heliconius numata silvana* Cramer NYM, Heliconiinae Z

NIGER**2013 July 1** (Orchids & Butterflies) (Stamperija)

MS of four stamps, each also in SS of one plus two SS of two, one containing #a & #c and the other #b & #d. Each SS has an additional butterfly in the margin.

a 750fr U/I BUTTERFLY (in background) Lepidoptera B
 b 750fr Alpine Black Swallowtail, *Papilio maackii* Ménétries PAP, Papilioninae A
 c 750fr U/I BUTTERFLY (in background) Lepidoptera B
 d 750fr Bhutan Glory, *Bhutanitis lidderdalei* Atkinson PAP, Parnassiinae A
 MS of 4 (#a-d)
 SS 2500fr Common Mormon, *Papilio polytes* L. PAP, Papilioninae A

2013 September 30 (Fight Against Malaria) (Stamperija)

a-d 4x750fr *Anopheles* sp. CUL, Anophelinae U
 SS 2500fr *Anopheles* sp. CUL, Anophelinae U

2013 September 30 (Bees & Flowers) (Stamperija)

a-d 4x750fr BEES Hymenoptera U
 SS 2500fr BEE Hymenoptera U

PERU**2013** (Butterflies of Peru)

a 4s *Hypanartia splendida* Rothschild NYM, Nymphalinae A
 b 4s *Isanthrene flavizonata* Gaede ARC, Ctenuchinae A
 c 4s *Protesilaus glaucolaus* Bates PAP, Papilioninae A
 d 4s *Histioea peruana* Gaede ARC, Ctenuchinae A
 MS of 4 (#a-d)
 Margin Stylized SWALLOWTAIL PAP, Papilioninae S

POLAND**2013 August 16** (Registered Mail)

(3.80z) Mazarine Blue, *Polyommatus semiargus* Rottemburg (A: Econ) LYC, Polyommatae A
 (4.55z) *Aquarius paludum* Fabr. (Gerris of some) (B: Economy) Gerridae, Gerrinae A
 (5.95z) Alpine Longhorn, *Rosalia alpina* L. (A: Priority) CER, Cereambycinae A
 (7.30z) Yellow-winged Darter, *Sympetrum flaveolum* L. (B: Priority) LIB, Sympetrinae A

ROMANIA**2013 June 7** (Live Healthy/Honey)

1L	Honey from Western Honeybee, <i>Apis mellifera</i> L. (walnuts)	API, Apinae	R
1.40L	Same (with hazelnuts)	API, Apinae	R
6L	Same (with berries)	API, Apinae	R
8.10L	Same (with berries & nuts)	API, Apinae	R
	SS of 4 (as above)		

ST. KITTS**2013 August 12** (Butterflies of the Caribbean) (MS of 10)

a	\$1.60	Bates's Olivewing, <i>Nessaea batesii</i> C&R Felder	NYM, Biblidinae	A
b	\$1.60	Orange-barred Sulfur, <i>Phoebis philea</i> L.	PIE, Coliadinae	A
c	\$1.60	Blue Satyr, Blue Ringlet, <i>Chloreuptychia arnaca</i> Fabr.	NYM, Satyrinae	A
d	\$1.60	Red Flasher, <i>Panacea prola</i> Doubleday & Hewitson	NYM, Limenitidinae	A
e	\$1.60	Ruddy Daggerwing, <i>Marpesia petreus</i> Bates	NYM, Cyrestinae	A
f	\$1.60	<i>Hypoleria ocalea</i> Doubleday & Hewitson	NYM, Danainae	A
g	\$1.60	Malayan Crow, <i>Euploea camaralzeman</i> Butler	NYM, Danainae	A
h	\$1.60	Blue Morpho, <i>Morpho menelaus</i> L.	NYM, Morphinae	A
i	\$1.60	Variable Cattleheart, <i>Parides erithalion</i> Boisduval	PAP, Papilioninae	A
j	\$1.60	<i>Heliconius aoede</i> Hübner	NYM, Heliconiinae	A

2013 August 12 (Moths of the Caribbean) (MS of 4)

a	\$3	<i>Athis clitarcha</i> Westwood	CAS, Castniinae	A
b	\$3	<i>Oryba kadeni</i> Schaufuss	SPH, Macroglossinae	A
c	\$3	<i>Copaxa denda</i> Druce	SAT, Saturniinae	A
d	\$3	<i>Citheronia azteca</i> Schaus	SAT, Ceratocampinae	A

ST. THOMAS & PRINCE ISLANDS 2013 May 10 (African Fauna: Bees) (Stamperija)

a	25000d	Western Honeybee, <i>Apis mellifera</i> L., two bees on white flower	API, Apinae	A
b	25000d	Same, two bees on red flower	API, Apinae	A
c	25000d	Same, one bee on pink flower	API, Apinae	A
d	25000d	Same, two bees on pink flower	API, Apinae	A
		MS of 4 (#a-d)		
	SS 95000d	Same, also in margin	API, Apinae	A

2013 May 10 (African Fauna: Butterflies) (Stamperija)

a	25000d	False Chief, <i>Pseudacraea lucretia gamae</i> Joicey & Talbot	NYM, Limenitidinae	A
b	25000d	L: Sciathic Bush Brown, <i>Bicyclus sciathis</i> Hewitson (Cap: <i>Mycalesis sciathis</i>) R: <i>Thamala marciiana</i> Hewitson (Cap: <i>Myrina marciiana</i>)	NYM, Satyrinae	A
c	25000d	L: Mocker Swallowtail, <i>Papilio dardanus</i> Brown ♀ (Cap: <i>Papilio hippocoon</i>) (a female mimetic variant) R: Common Evening Brown, <i>Melanitis leda</i> L. (Cap: <i>Melantis</i>)	PAP, Papilioninae	A
d	25000d	Large Spotted Acraea, <i>Acraea zetes</i> L. MS of 4 (#a-d)	NYM, Satyrinae	A
	SS 95000d	L: Iulus Sapphire, <i>Iolus iulus</i> Hewitson R: Foxy Charaxes, <i>Charaxes jasius</i> L.	NYM, Heliconiinae	A
	Margin	UL: <i>Papilio sosia</i> Rothschild & Jordan (Cap: <i>Papilio sosti</i>) UR: Scarce Bamboo Page, <i>Philaethria dido</i> L. LR: Pirate, <i>Catacroptera cloanthe</i> Stoll	PAP, Papilioninae	Z
			NYM, Heliconiinae	Z
			NYM, Nymphalinae	Z

SAN MARINO**2013 June 7** (550th Anniversary of San Marino Borders)

1891a	70c	INSECT & map		C
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2013 October 9 (50th Anniv. Italian Thematic Philately Center)

€1	LL: Stylized BUTTERFLY & dog (Sc#1483a s-o-s)	Lepidoptera	S
	LR: Peacock, <i>Nymphalis io</i> L. (Sc#567 s-o-s)	NYM, Nymphalinae	B

ST. MARTIN**2013 May 2** (Butterflies) (Block of 12)

25c	Bredow's Sister, <i>Adelpha bredowii</i> Geyer	NYM, Limenitidinae	A
50c	Brilliant Jewel, <i>Anteros carausius</i> Westwood	Riodinidae	A
75c	Sara's Orange Tip, <i>Anthocharis sara</i> Lucas	PIE, Pierinae	A
100c	Leilia Hackberry Butterfly, <i>Asterocampa leilia</i> Edwards	NYM, Apaturinae	A
150c	Red-banded Hairstreak, <i>Calycopis cecrops</i> Fabr.	LYC, Theclinae	A
175c	Foxy Charaxes, <i>Charaxes jasius</i> L.	NYM, Charaxinae	A
225c	Silvery Blue, <i>Glaucopsyche lydamus</i> Doubleday	LYC, Polyommatinae	A
250c	Brimstone, <i>Gonepteryx rhamni</i> L.	PIE, Coliadinae	A
325c	Blue Cracker, <i>Hamadryas feronia</i> L.	NYM, Biblidinae	A
350c	Acmon Blue, <i>Plebejus acmon</i> Westwood	LYC, Polyommatinae	A
375c	Common Checkered Skipper, <i>Pyrgus communis</i> Grote	HES, Pyrginae	A
400c	Gray Hairstreak, <i>Strymon melinus</i> Hübner	LYC, Theclinae	A

SOLOMON ISLANDS**2013 May 3** (Toward Australia 2013: Animals)

a	\$7 DRAGONFLY with sugar glider (Australia Sc#3536 s-o-s)	Odonata	C
b	\$7 Flying Ladybug with kangaroo (Australia Sc#3534 s-o-s)	Coccinellidae	C
c	\$7 Flying Grasshopper with bilby (Australia Sc#3532 s-o-s)	Orthoptera	C
d	\$7 Stylized BUTTERFLY with dingo (Australia Sc#3533 s-o-s)	Lepidoptera	C
	MS of 4 (#a-d)		
SS \$20	Flying Cicada with koala (Australia #3535 s-o-s)	Cicadidae	C

2013 May 10 (Australian Fauna: Butterflies)

a	\$7 Spot Swordtail, <i>Graphium nomius</i> Esper	PAP, Papilioninae	A
b	\$7 Blue Triangle, <i>Graphium sarpedon</i> L.	PAP, Papilioninae	A
c	\$7 New Guinea Birdwing, <i>Troides priamus poseidon</i> Dbldy. ♀	PAP, Papilioninae	A
d	\$7 New Guinea Birdwing, <i>Troides priamus poseidon</i> Dbldy. ♂	PAP, Papilioninae	A
	MS of 4 (#a-d)		
Margin	UL: Blue Triangle, <i>Graphium sarpedon</i> L.	PAP, Papilioninae	Z
	LL: Ulysses, <i>Papilio ulysses</i> L.	PAP, Papilioninae	Z
	UR: Caper White, <i>Belenois java</i> L. (verso) ♀	PIE, Pierinae	Z
	LR: <i>Papilio bridgei</i> Mathew	PAP, Papilioninae	Z
SS \$35	Caper White, <i>Belenois java</i> L. (verso) ♀	PIE, Pierinae	A
Margin	UL: Orchard Swallowtail, <i>Papilio aegaeus</i> Donovan ♀(L) ♂(R)	PAP, Papilioninae	Z
	LL: Blue Triangle, <i>Graphium sarpedon</i> L.	PAP, Papilioninae	Z
	UR: Union Jack, <i>Delias mysis</i> Fabr.	PIE, Pierinae	Z
	LR: Caper White, <i>Belenois java</i> L. ♂	PIE, Pierinae	Z

SPAIN**2013 October 14** (JUVENIA 2013: Natl. Youth Philatelic Exhibition)

75c	Stylized BUTTERFLY on kite (with boy, girl, trees, fortress)	Lepidoptera	S
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TANZANIA**2011 April 15** (Grasshoppers of Tanzania) (New data from Jose Reis)

2606	500sh Great Green Bush Cricket, <i>Tettigonia viridissima</i> L.	TET, Tettigoniinae	A
2607	700sh <i>Truxalis</i> sp. (Cap: <i>Phymateus morbillosus</i>)	ACR, Acridinae	A
2608	800sh Common Stick Grasshopper, <i>Acrida acuminata</i> Stål	ACR, Acridinae	A
2609	900sh ??Desert Locust, <i>Schistocerca gregaria</i> Forskål	ACR, Cyrtacanthacridinae	A
2610a	700sh Migratory Locust, <i>Locusta migratoria migratorioides</i> Reiche & Fairmaire	ACR, Oedipodinae	A
2610b	700sh Red Locust, <i>Nomadacris septemfasciata</i> Serville (Cap: <i>Dictyophorus spumans</i>)	ACR, Cyrtacanthacridinae	A
2610c	700sh <i>Phymateus morbillosus</i> L. (Cap: <i>Phymateus viridipes</i>)	PYRG, Pyrgomorphae	A
2610d	700sh Edible Grasshopper, <i>Ruspolia nitidula</i> Scopoli (<i>Homorocoryphus</i> of some)	TET, Conocephalinae	A

TANZANIA (continued)

2610e	700sh	Foam Grasshopper, <i>Dictyophorus spumans</i> Thunberg (Cap: <i>Gryllotalpa africana</i>)	PYRG, Pyrgomorphinae	A
2610f	700sh	??Garden Locust, <i>Acanthacris ruficornis citrina</i> Serville (Cap: <i>Tettigonia viridissima</i>)	ACR, Cyrtacanthacridinae	A
2611	SS 600sh	Elegant Grasshopper, <i>Zonocerus elegans</i> Thunberg	PYRG, Pyrgomorphinae	A
2013 (Insects of Africa) (Stamperija)				
a	2000sh	African Bush Grasshopper, <i>Phymateus viridipes</i> Stål	PYRG, Pyrgomorphinae	A
b	2000sh	Devil's Flower Mantis, <i>Blepharopsis mendica</i> Fabr.	Empusidae, Blepharodinae	A
c	2000sh	African Moon Moth, <i>Argema mimosae</i> Boisduval	SAT, Saturniinae	A
d	2000sh	Common Pond Damselfly, <i>Ceriagrion glabrum</i> Burmeister MS of 4 (#a-d)	COE, Coenagrioninae	A
	SS 5500sh	Giant African Fruit Beetle, <i>Chelorrhina polyphemus</i> Fabr.	SCA, Cetoniinae	A

TOGO**2013 July 22 (Extinct Species) (Stamperija)**

b	750fr	Xerces Blue, <i>Glaucopsyche xerces</i> Boisduval MS of 4 (#a-d), also in SS of 1	LYC, Polyommatae	A
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2013 July 22 (Butterflies & Mushrooms) (Stamperija)

a	750fr	New Guinea Birdwing, <i>Troides priamus</i> L.	PAP, Papilioninae	A
c	750fr	Virgin Tiger Moth, <i>Grammia virgo</i> L. MS of 4 (#a-d)	ARC, Arctiinae	A
	SS 2500fr	Blue Morpho, <i>Morpho rhetenor</i> Cramer	NYM, Morphinae	A
	Margin:	Monarch, <i>Danaus plexippus</i> L.	NYM, Danainae	Z

2013 August 30 (Butterflies) (Stamperija)

	3x950fr	U/I BUTTERFLIES	Lepidoptera	U
	SS 2500fr	U/I BUTTERFLY	Lepidoptera	U

TONGA (Niufo'ou)**2013 September 6 (Like 2012 issue) (from Jose Reis)**

The 2012 issues of various other values of these butterfly stamps with blue or white margins, exist with and without the letter "L" missing from the word butterfly. Apparently both versions are equally common, since they sell for the same retail price.

	20s	Blue Moon, <i>Hypolimnas bolina</i> L.	NYM, Nymphalinae	A
	30s	Monarch, <i>Danaus plexippus</i> L.	NYM, Danainae	A
	40s	Meadow Argus, <i>Junonia villida</i> Fabr.	NYM, Nymphalinae	A
	50s	Indian Crow, <i>Euploea core</i> Cramer	NYM, Danainae	A
	60s	Blue Moon, <i>Hypolimnas bolina</i> L.	NYM, Nymphalinae	A
	80s	Monarch, <i>Danaus plexippus</i> L.	NYM, Danainae	A
	90s	Meadow Argus, <i>Junonia villida</i> Fabr.	NYM, Nymphalinae	A
	1.10pa	Indian Crow, <i>Euploea core</i> Cramer	NYM, Danainae	A
	1.20pa	Blue Moon, <i>Hypolimnas bolina</i> L.	NYM, Nymphalinae	A
	10pa	Blue Moon, <i>Hypolimnas bolina</i> L.	NYM, Nymphalinae	A
	12.50pa	Monarch, <i>Danaus plexippus</i> L.	NYM, Danainae	A
	20pa	Meadow Argus, <i>Junonia villida</i> Fabr.	NYM, Nymphalinae	A

TURKISH REP. OF NORTHERN CYPRUS 2013 July 8

	25k	L: U/I BUTTERFLIES mating	LYC, Polyommatae	U B
		R: European Mantis, <i>Mantis religiosa</i> L.	MAN, Mantidae	B

UGANDA

2013 July 8 (Endangered Butterflies) (Stamperija)

1800sh	Lange's Metalmark, <i>Apodemia mormo langei</i> Comstock ♀	Riodinidae	A
1800sh	Schaus Swallowtail, <i>Papilio aristodemus ponceanus</i> Schaus ♂ (Cap: <i>Heraclides aristodemus ponceanus</i>)	PAP, Papilioninae	A
7500sh	Orange-bordered Blue, <i>Plebejus melissa samuelis</i> Nabokov ♂ (Cap: <i>Lycaeides melissa samuelis</i>)	LYC, Polyommatinae	A
7500sh	Zerene Fritillary, <i>Speyeria zerene behrensii</i> Edwards ♀ MS of 4 s/t	NYM, Heliconiinae	A
SS 7500sh	Mission Blue, <i>Aricia icarioides missionensis</i> Behr ♂ (Cap: <i>Icaricia icarioides missionensis</i>)	LYC, Polyommatinae	A
Margin	UL: Same	LYC, Polyommatinae	Z
	LL: Bay Checkerspot, <i>Euphydryas editha bayensis</i> Sternitzky	NYM, Nymphalinae	Z
	LR: Schaus Swallowtail, <i>Papilio aristodemus ponceanus</i> Schaus	PAP, Papilioninae	Z

UNITED STATES

2014 February

??c	Great Spangled Fritillary, <i>Speyeria cybele</i> Fabr.	NYM, Heliconiinae	A
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URUGUAY

2013 May 17 (Rural Workers' Rights)

15p	Beekeeper & Western Honeybees, <i>Apis mellifera</i> L.	API, Apinae	B
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ZIMBABWE

2012 November 20 (Life of Ants and Termites) (New data)

1158	75c L: TERMITE R: Matabele Soldier Ant, <i>Dorylus</i> sp.	Hodotermitidae FOR, Ecitoninae	A A
1160	\$1 TERMITE environment	Hodotermitidae	R
1160a	SS of 6 (Sc#1155–60)		

URUGUAY INSECTS

On 30 August 2013, Uruguayan Postal Administration issued a set of 15p stamps depicting insects. The stamps are in a se-tenant MS of eight containing two of each stamp plus four labels that describe each of the species shown.

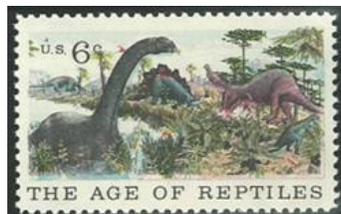
Borellia bruneri Rehn (Acrididae). This locust is a serious crop pest in southern South America.

Diloboderus abderus Sturm (Dynastidae). This beetle, native to southern South America, exhibits marked sexual dimorphism. The males have a prominent horn on the head and two smaller horns on the thorax, which the females lack. The females can fly, but the males are flightless due to fused wing cases.

Sulcophanaeus menelas Laporte-Castelnau (Scarabaeidae). This dung beetle is common throughout southern South America. The male has a prominent horn and protrusions on the thorax, which the female lacks. Their shiny green carapace makes them popular with collectors.

Apis mellifera L. (Apidae). The Western Honeybee is a familiar species. Native to Europe, Asia, and Africa, it was introduced to the Americas in the 1600s and has spread throughout both continents. It is well known that these bees provide an important agricultural function as pollinators and also produce honey, beeswax, and pollen as commercial crops.





PALEONTOLOGY

Editor

Dr. Hans-Peter Schultze



Scott# Denom Common Name/Scientific Name

Order: Family

MAN

CENTRAL AFRICAN REPUBLIC 2012 June 10 (Prehistoric Man)

750fr	Homo erectus (with Dimetrodon)	Primates: Hominoidea
750fr	Neanderthal, <i>Homo neanderthalensis</i> (with <i>Pteranodon</i>)	Primates: Hominoidea
750fr	<i>Paranthropus boisei</i> (with <i>Mastodon</i>)	Primates: Hominoidea
750fr	<i>Homo sapiens</i>	Primates: Hominoidea
	MS of 4	
Margin	LL: <i>Homo habilis</i>	Primates: Hominoidea
SS 2650fr	<i>Homo habilis</i> (with <i>Pentaceratops</i>)	Primates: Hominoidea
Margin	LL: Neanderthal, <i>Homo neanderthalensis</i>	Primates: Hominoidea

GUINEA-BISSAU 2013 June 3 (Prehistoric Man)

900fr	scene of prehistoric man	Primates: Hominoidea
900fr	scene of prehistoric man	Primates: Hominoidea
900fr	scene of prehistoric man	Primates: Hominoidea
900fr	scene of prehistoric man	Primates: Hominoidea
SS 3300fr	scene of prehistoric man	Primates: Hominoidea

NIGER 2013 September 30 (Prehistoric Man)

750fr	<i>Homo georgicus</i> (with bear)	Primates: Hominoidea
750fr	<i>Homo neanderthalensis</i> (cave drawings)	Primates: Hominoidea
750fr	<i>Homo tyrolensis</i>	Primates: Hominoidea
750fr	<i>Homo erectus</i>	Primates: Hominoidea
	MS of 4	
SS 2500fr	<i>Homo neanderthalensis</i> (cave drawings)	Primates: Hominoidea

MAMMALS

GAMBIA 2013 April 4 (History of Art: Cave Paintings of Lascaux) (MS of 3)

45d	Aurochs, <i>Bos primigenius</i>	Artiodactyla: Bovidae
45d	Horses	Perissodactyla
45d	Horse and deer	Perissodactyla + Artiodactyla

SOLOMON ISLANDS 2013 May 10 (Australian Fauna: Extinct Kangaroos)

There is a MS of 4 kangaroos issued with this SS, and while they may be endangered, none are extinct yet.

SS \$35	<i>Procoptodon goliah</i>	Diprotodontia: Macropodidae
Margin	LR: <i>Protemnodon anak</i>	Diprotodontia: Macropodidae
	UL: <i>Sthenurus</i>	Diprotodontia: Macropodidae
	UR & LL: <i>Procoptodon goliah</i>	Diprotodontia: Macropodidae

SOLOMON ISLANDS (continued) 2013 May 10 (Australian Fauna: Extinct Mammals)

\$7	Thylacine, <i>Thylacinus cynocephalus</i>	Marsupialia: Dasyuroidea
\$7	Toolache wallaby, <i>Macropus greyi</i>	Marsupialia: Diprodonta
\$7	Eastern Hare-wallaby, <i>Lagrochetes leporides</i>	Marsupialia: Diprodonta
\$7	Obdurodon, <i>Obdurodon dicksoni</i>	Monotremata: Ornithorhynchidae
	MS of 4	
Margin	LL: Short-tailed Hopping-mouse, <i>Notomys amplus</i>	Rodentia: Muridae
	LR: Broad-faced Potoroo, <i>Potorous platyops</i>	Diprotodontia: Potoroidae
SS \$35	Thylacine, <i>Thylacinus cynocephalus</i>	Marsupialia: Dasyuroidea
Margin	LL: Crescent Nail-tail Wallaby, <i>Onychogalea lunata</i>	Diprotodontia: Macropodidae
	UR: <i>Chunia illuminata</i>	Diprotodontia: Ektopodontidae
	LR: Thylacine, <i>Thylacinus cynocephalus</i>	Marsupialia: Dasyuroidea

2013 May 10 (Australian Fauna: Endangered Mammals)

\$7	Northern Hairy-nosed Wombat, <i>Lasiorhinus krefftii</i>	Marsupialia: Vombatidae
\$7	Numbat, <i>Myrmecobius fasciatus</i>	Dasyuromorphia, Myrmecobiidae
\$7	Bridled Nail-tail Wallaby, <i>Onychogalea fraenata</i>	Diprotodontia, Macropodidae
\$7	Tasmanian Devil, <i>Sarcophilus harrisii</i>	Dasyuromorphia, Dasyuridae
SS \$35	Lumholtz's Tree-kangaroo, <i>Dendrolagus lumholtzi</i>	Diprotodontia, Macropodidae
Margin	LR: Same (also in UL margin of MS)	Diprotodontia, Macropodidae
	UL: Tasmanian Devil, <i>Sarcophilus harrisii</i>	Dasyuromorphia, Dasyuridae
	LL: Bridled Nail-tail Wallaby, <i>Onychogalea fraenata</i>	Diprotodontia, Macropodidae

TOGO 2013 July 22 (Extinct Species)

a	750fr <i>Protemnodon anak</i>	Diprotodontia: Macropodidae
c	750fr Thylacine, <i>Thylacinus cynocephalus</i>	Marsupialia: Dasyuroidea
	MS of 4 (#a–d)	
SS 2500fr	Long-horned Bison, <i>Bison latifrons</i>	Artiodactyla: Bovidae

FISH**TOGO 2013 July 22 (Extinct Species)**

d	750fr <i>Bothriolepis canadensis</i>	Antiarchi: Bothriolepididae
	MS of 4 (#a–d)	

BIRDS**CENTRAL AFRICAN REPUBLIC 2012 June 10 (Prehistoric Man)**

SS 2650fr	Margin LR: <i>Archaeopteryx</i>	Aves: Archaeopterygidae
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TOGO 2013 July 22 (Fossils and Volcanoes)

SS 2500fr	<i>Archaeopteryx</i>	Aves: Archaeopterygidae
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2013 July 22 (Extinct Species)

SS 2500fr	Margin L: Dodo, <i>Raphus cucullatus</i>	Aves: Columbidae
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REPTILES**CENTRAL AFRICAN REPUBLIC 2012 June 10 (Prehistoric Man)**

a	750fr <i>Dimetrodon grandis</i> (with <i>Homo erectus</i>)	Synapsida: Sphenacodontidae
b	750fr <i>Pteranodon</i> (with <i>Homo neanderthalensis</i>)	Pterosauria: Pteranodontidae
	MS of 4 (#a–d)	
Margin	LR: <i>Hypacrosaurus</i>	Ornithischia: Hadrosauridae
SS 2650fr	<i>Pentaceratops</i> (with <i>Homo habilis</i>)	Ornithischia: Ceratopsidae

GREAT BRITAIN**2013 October 10** (Fossil Reptiles from the UK)

(60p)	<i>Polacanthus</i>	Ornithischia: Nodosauridae
(60p)	<i>Ichthyosaurus</i>	Ichthyosauria: Ichthyosauridae
(60p)	<i>Iguanodon</i>	Ornithischia: Hadrosauriformes
(60p)	<i>Ornithocheirus</i>	Pterosauria: Ornithocheiridae
(60p)	<i>Baryonyx</i>	Saurischia: Theropoda
	Horiz strip of 5	
(60p)	<i>Dimorphodon</i>	Pterosauria: Dimorphodontidae
(60p)	<i>Hypsilophodon</i>	Ornithischia: Ornithopoda
(60p)	<i>Cetiosaurus</i>	Sauropsida: Sauropodomorpha
(60p)	<i>Megalosaurus</i>	Sauropsida: Theropoda
(60p)	<i>Plesiosaurus</i>	Sauropterygia: Plesiosauria
	Horiz strip of 5	

GUINEA-BISSAU**2013 March 25** (Prehistoric Ocean Reptiles)

a	600fr	<i>Macroplata tenuiceps</i>	Plesiosauria: Rhomaleosauridae
b	600fr	<i>Rhomaleosaurus</i>	Plesiosauria: Rhomaleosauridae
c	600fr	<i>Elasmosaurus</i>	Plesiosauria: Elasmosauridae
d	600fr	<i>Kronosaurus</i>	Plesiosauria: Pliosauridae
e	600fr	<i>Liopleurodon</i>	Plesiosauria: Pliosauridae
		MS of 5 (#a–e)	
	SS 2800fr	<i>Macroplata tenuiceps</i>	Plesiosauria: Rhomaleosauridae
	Margin	UR: <i>Elasmosaurus</i>	Plesiosauria: Elasmosauridae
		Bot: <i>Elasmosaurus</i>	Plesiosauria: Elasmosauridae
		LL: <i>Kronosaurus</i>	Plesiosauria: Pliosauridae

ST. VINCENT (Bequia)**2012 September 27** (Dinosaurs)

\$2.75	<i>Zhenyuanopterus</i>	Pterosauria: Boreopteridae
\$2.75	<i>Stegosaurus</i>	Ornithischia: Stegosauria
\$2.75	<i>Torosaurus</i>	Ornithischia: Ceratopsia
\$2.75	<i>Sauropelta</i>	Ornithischia: Ankylosauria
\$2.75	<i>Styracosaurus</i>	Ornithischia: Ceratopsia
\$2.75	<i>Brontosaurus</i>	Saurischia: Sauropoda
		MS of 6 (with Theropod skeletons in margin background)
\$4.75	<i>Tyrannosaurus</i>	Saurischia: Theropoda
\$4.75	<i>Camarasaurus</i>	Saurischia: Sauropoda
		SS of 2 (designs extend into margin)

INVERTEBRATES**GUINEA-BISSAU****2013 June 2** (Minerals)

SS 2800fr	Ammonite	Cephalopoda: Ammonoidea
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TOGO**2013 July 22** (Fossils and Volcanoes) (also in SS of 1)

b	750fr	Ammonite	Cephalopoda: Ammonoidea
d	750fr	Trilobite	Arthropoda: Trilobita
		MS of 4 (#a–d)	

BIOLOGY REFERENCE WEB SITES

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 entries since the last publication are indicated with an asterisk (*).

STAMP ISSUES

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

<http://www.cyberstamps.com>

Delcampe. Worldwide listings and illustrations of stamps for sale.

<http://stamps.delcampe.net/page/category/cat,-1,language,E.html>

Neofila. Modern issues from Russia, Eastern Europe, and Baltic States.

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

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.

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

Stanley Gibbons. Searchable on-line stamp catalogue from Stanley Gibbons.

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

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

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

GENERAL

Fauna-Stamps. Listings of stamps for sale (mainly new issues) on all sorts of biological themes including Cats, Dogs, Horses, Birds, Butterflies, Paleontology, Flora, and WWF animal stamps.

<http://www.fauna-stamps.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.

<http://zipcodezoo.com/>

BOTANY

Encyclopedia of Plants. All kinds of information about plants including cultivation. Searchable by common name or scientific name. Grouped by plant types.

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

Fungal Biodiversity Center. 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/>

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

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

Lichens of North America. Many photos of lichens and links to related sites.

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

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/>

ENTOMOLOGY:

Cercopoidea Organised On Line. Taxonomic database operated under the auspices of *Université Pierre-et-Marie-Curie* in Paris and dedicated to the insects Cercopoidea, which belong to the Hemiptera order.

<http://rameau.snv.jussieu.fr/cool/index.php>

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>

International Odonata Research Institute. Information about dragonflies and damselflies, including listings by geographical area, taxonomy, and links to related sites.

<http://www.iodonata.net/>

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

<http://www.nhm.ac.uk/research-curation/research/projects/butmoth/>

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, but does not include dinosaurs.

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

Sea Turtle Postage Stamps of the World. Shows over 1800 images of stamps, maxi cards, covers, and cinderellas that feature the sea turtle as the subject. Includes checklists by country, new issues, and links to many related sites.

<http://www.2xtreme.net/~nlinsley/>

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/>

ORNITHOLOGY

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

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

Birds on Stamps. Listings of local, unofficial, and cinderella issues featuring birds—last updated in 2007.

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

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/>

Paleophilatelic. Catalogue of Paleontology related philatelic items, such as paleontologists, fossils, prehistoric animals, dinosaurs, early man, museums on official post stamps, envelopes, and post cards. Contains links to related news items and sites.

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

GLOSSARY OF TERMS

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

Checklist Codes:

Br	Branch	A	Subject is the primary design element
Fl	Flowers (with or without other plant parts)	B	Subject is only part of the main design
Fr	Fruit (including seeds, nuts, grains, etc.)	C	Subject is a minor representation
FrV	Grain head with sheaf or stalk	G	Subject is a generalized depiction
L	Lichen	R	Related subject (e.g., scientist, equipment)
M	Mushroom or fungus	S	Subject is a stylized or symbolic depiction
T	Trees (without flowers or fruit)	U	Subject is unidentified or unidentifiable
V	Various (vines, vegetables, roots, leaves, etc.)	X	Subject is a lookalike (e.g., mushroom cloud)
Wr	Wreath	Z	Subject is in the margin or selva
Wr*	Head wreath (or chaplet)	*	Subject depicted in natural colors

Acronyms and Abbreviations:

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

EDITOR BIOGRAPHIES

This section continues our series of biographical information about our Associate Editors that we began in the Volume 62, Number 1. The Associate Editors continue a long tradition in *Biophilately* of providing research data and expert commentary on both philatelic matters and biological topics. Many of them are also authors of some of the checklists and handbooks published by the ATA.

Paul A. Mistretta

[Ed. Note: Dr. Paul A. Mistretta joined the Biology Unit in 1996. He took over as Associate Editor of the Fungi column from Norma McCumber in 2002.]

Paul was born in New York City, the second of nine children and has resided in six states all in the east. He received a B.S. in Biology from Fordham College in 1967, an M.F. in Forest Protection specializing in Forest Pathology from the Duke University School of Forestry in 1970, and a Ph.D. in Botany and Plant Pathology specializing in Mycology from the University of Maine in 1974.

From the viewpoint of his collecting interests, his degrees go a long way to explaining two of his topical interests: fungi on stamps, and trees on stamps.

Paul retired at the end of 2011 having worked just short of 35 years for the USDA Forest Service, first as an aerial observer detecting insect and disease damage to the timber resource of the National Forests in the Forest Service's Southern Region, then as a practicing Forest Pathologist, and finally as the Regional Pesticide Specialist for the Forest Service Southern Region.

A friend in his Boy Scout troop introduced him to stamp collecting when he was age 12 starting with a collection of US first day covers.

Paul is very active in philately. He is a member of the American Philatelic Society (including the American Philatelic Research Library and Writers Unit #30), the American Topical Association, the Germany Philatelic Society, the China Stamp Society, The Perfins Club (currently a Director-at-Large), and the Precancel Stamp Society. And, according to him, he unfortunately maintains collections related to all of these societal themes.

He has served as Editor of *The Perfins Bulletin* in two separate time frames (in the mid 1980s while still in graduate school, and more recently, from 2002–09) totaling about ten years. He has been Associate Editor of the Fungi New Issues column for the past 11 years. In addition, he is the author and co-author of numerous scientific publications dealing with timber and forestry diseases.

Paul makes his own albums for topicals and for revenues when commercial albums do not meet his needs, and he maintains extensive computer files related to stamps.

He is a voracious reader of philatelic and scientific publications related to his areas of interest, and also of fantasy and science fiction, among other genres. He has had a life-long romance with fine art and classical music and (he says) to avoid boredom in retirement, he has again started painting and dabbling in model railroading.

Paul and his wife have been married for 43 years and have four sons and two daughters and five granddaughters



Paul A. Mistretta

Michael J. Prince

[Ed. Note: Michael Prince joined the Biology Unit in 1978. He contributed his first article in 1983. In 1984, he began writing a column titled "Mammals Biographical," which was the mammal equivalent of the "New Birds in the Philatelic Aviary" column. In 2001, he took over the Mammalia New Issues column from David Meixner, who had become too ill to continue it. Michael lives in Aldershot, Hampshire, England. He is involved in local civic activities, but informs me he would prefer to keep his personal details private, so I will honor his request.]

CONSTITUTION OF THE BIOLOGY UNIT OF THE A.T.A.

Article 1. Name

Section 1. The name of this organization shall be the Biology Unit of the American Topical Association (the Unit).

Section 2. The objectives of the Biology Unit shall be:

- (1) The study and collection of stamps and related material portraying the various aspects of biology or allied subjects.
- (2) The dissemination of this information to members of the Unit and to other philatelic enthusiasts.

Article 2. Membership

Section 1. Membership is open to anyone interested in the objectives of the Unit.

Section 2. Application for membership shall be made in writing to the Secretary or to the President and shall be accompanied by the appropriate dues payment.

Section 3. The membership fee (annual dues) shall be determined by the Governing Board. (See By-Laws)

Section 4. In order for members to be in good standing with the Unit, they must have paid their dues in accordance with the schedule established by the Unit By-Laws.

Article 3. Officers

Section 1. The officers of the Unit shall consist of a President, a Vice-President, a Secretary, and a Treasurer. The officers and four elected Directors shall constitute the Governing Board, which shall exercise general supervision and conduct the business of the Unit.

(1) Presidents and Editors Emeriti shall be honorary, non-voting members of the Governing Board, unless they are elected to another officer or Director position. Retiring Presidents and Editors in good standing shall automatically have Emeritus status.

(2) At the discretion of the Governing Board, the offices of the Secretary and Treasurer may be combined in one individual to facilitate the conduct of Unit business.

Section 2. The President shall have general charge of the business and affairs of the Unit, shall preside at all Unit meetings, shall appoint all standing committees, and shall be a member ex-officio of all committees. The President shall make a report of significant Unit activities each year to be published in *Biophilately*.

Section 3. The Vice-President shall preside at meetings of the Unit in the absence of the President, and shall succeed the President in the event of resignation, incapacitation, or death of that officer. In the event that neither officer can serve, the remaining members of the Governing Board shall appoint the necessary replacements.

Section 4. The Secretary shall conduct correspondence relative to the welfare and operation of the Unit and shall keep records of the meetings, membership rosters and records, and other business of the Unit and its Governing Board.

Section 5. The Treasurer shall take charge of all of the Unit funds and shall pay such bills as are due and approved by the Governing Board. The Treasurer shall make an annual report of the financial status of the Unit by publication in *Biophilately*.

Section 6. The Governing Board has the authority to take any action, required for the operation of the Unit, that is not specified by this Constitution or the By-Laws. The current edition of *Roberts Rules of Order* shall be the controlling authority in all cases, unless otherwise specified by this Constitution.

Article 4. Nominations and Election of Officers

- Section 1. Nomination of the officers shall be made by a Nominating Committee of three appointed by the President, or by any member sending nominations to the Nominating Committee by a date set by the President.
- Section 2. The report by the Nominating Committee together with any nominations from the membership shall be delivered to the President by the date established for the committee and shall be published in *Biophilately*.
- Section 3a. All officers and Directors, except Presidents and Editors Emeriti, shall be elected by mail ballots published in *Biophilately*, or distributed by special mailing, and returned to the designated person or committee for counting.
- Section 3b. All Unit members in good standing shall be qualified to vote in elections.
- Section 4. Necessary for election shall be a majority of the ballots cast and received by the date set by the President, but not earlier than 30 days after the date of publication of the nominations.
- Section 5. The term of officers and Directors shall be two years.
- Section 6. The fiscal year, which determines the year for dues and tenure of officers, shall be set by the Governing Board.

Article 5. Meetings

- Section 1. Meetings of the Unit shall be held annually at the Annual Meeting of the American Topical Association, at the place designated by the ATA. This meeting shall be primarily social in character. The Governing Board may use a portion of the meeting agenda to discuss urgent business. Otherwise, business is to be conducted by the Governing Board, or by membership via the mail.

Article 6. Committees

- Section 1. The President shall have the power to appoint such committees as that officer deems necessary. The President shall do this by appointing the chairman of the committee, who shall have the power to appoint the other committee members, subject to Presidential approval.

Article 7. Amendments to the Constitution

- Section 1. Amendments may be offered by any member by sending such amendments to the President who will submit same to the Editor for publication in *Biophilately*. The votes submitted shall constitute a quorum and the majority of votes cast shall determine adoption (or non-adoption) of the amendment.

BY-LAWS OF THE BIOLOGY UNIT OF THE A.T.A.

Article 1. Dues and Types of Membership

Section 1. Memberships and dues are as follows (2013):

Regular membership (US & Canada)	\$20.00
International membership	\$25.00
On-line membership.....	\$15.00

Section 2. An initiation fee may be set, if desired, by the Governing Board.

Section 3. All memberships shall be on an annual basis.

Section 4. The Governing Board may establish pro-rated payment methods for dues based on the point in the fiscal year when a new member joins the Unit.

Article 2. Nominations and Elections

Section 1. The time when nomination and election reports are to be made is to be determined by the President and the Governing Board.

Section 2. The fiscal year shall be from January 1st through December 31st.

Section 3. The term of office of elected officers shall conform with the fiscal year.

Article 3. Committees (Deleted in 2000)

Article 4. Official Unit Publication

Section 1. The name of the official Unit journal shall be *Biophilately*.

Section 2. The Editor shall be appointed by the President. The Editor is empowered to appoint such Associate Editors as necessary.

Section 3. In so far as possible, *Biophilately* shall be published quarterly. There will be four issues each fiscal year.

Section 4. Material to be published shall be submitted by any member or other persons interested in biological philately to the Editor or appropriate Associate Editor. The Editor is empowered to edit, include, or exclude any material submitted.

Article 5. Changing of By-Laws

Section 1. The By-Laws can be changed by a majority vote of the Governing Board, or the Board can determine that such change will be done by a vote of the membership after publication of the change in *Biophilately*. The ballots received shall constitute a quorum. A majority of the votes submitted shall determine adoption (or non-adoption) of the change(s).

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