

# BIOPHILATELY

OFFICIAL JOURNAL OF THE BIOLOGY UNIT OF ATA

SEPTEMBER 2016

VOLUME 65, NUMBER 3

## In Biology...

multiplication is the same as division.



## Biology Unit Member List

More Inside >>



## IN THIS ISSUE

From the Editor's Desk .....	165
President's Message .....	166
Secretary-Treasurer's Corner .....	167
New Members .....	167
News of Note .....	167
WSS-NY 2016 Report .....	169
Biology Reference Websites .....	241
Glossary .....	244
Membership Roster .....	245

## NEW ISSUES:

Botany – Christopher E. Dahle .....	189
Fungi – Paul A. Mistretta .....	197
Mammalia – Michael Prince .....	201
Ornithology – Glenn G. Mertz .....	209
Herpetology – Richard Roman .....	223
Invertebrates – Ian Hunter .....	228
Entomology – Donald Wright, Jr. ....	231
Paleontology – Michael Kogan .....	238

## ARTICLES & ILLUSTRATIONS:

Non-machinable Surcharge Rate Stamps – Jack R. Congrove .....	173
Alexander von Humboldt – Dr. Lyman R. Caswell .....	179
Winged Jewels – Raymond Ireson .....	183
Common Spices of India – Jayant Pai-Dhungat .....	185
New Birds in the Philatelic Aviary – Charles E. Braun .....	217

**BIOPHILATELY****Editor**

Jack R. Congrove  
P.O. Box 33092, Fort Lewis, WA 98433, USA  
jackcongrove@comcast.net

**Publisher**

Dick Roman  
Dick.Roman@SbcGlobal.Net

**Associate Editors**

Christopher E. Dahle *Botany*  
1401 Linmar Dr. NE, Cedar Rapids, IA 52402  
chris-dahle@biophilately.org

Dr. Paul A. Mistretta *Fungi*  
4148 Commodore Dr., Atlanta, GA 30341  
paulmistretta70@gmail.com

Michael J. Prince *Mammalia*  
"Dorset," Grove Road, Ash Vale, Aldershot, Hants. U.K.  
Michael.Prince@bushinternet.com

Glenn G. Mertz *Ornithology*  
625 N. Lafayette St., Allentown, PA 18104  
ggmertz@juno.com

Charles E. Braun *New Birds*  
7 Winthrop Drive, Aiken, SC 29803  
charlesebraun@gmail.com

Dick Roman (interim) *Herpetology*  
Dick.Roman@SbcGlobal.Net

Kris P. Lindstrom *Ichthyology*  
P.O. Box 51008, Pacific Grove, CA 93950  
kplenviro2@sti.net

Ian Hunter *Invertebrate Zoology*  
6 Tiller Pl SE, Airdrie, AB  
T4A 1S6, Canada  
ighunter@shaw.ca

Donald P. Wright, Jr. *Entomology*  
84 Woosamonsa Rd., Pennington, NJ 08534  
don.aa2f@verizon.net

Michael Kogan *Paleontology*  
Munich, Germany  
admin@paleophilatelie.eu

**BIOLOGY UNIT OF ATA**

Alan J. Hanks **President**  
34 Seaton Drive, Aurora, ON Canada L4G 2K1  
alan.hanks@sympatico.ca

Larry E. Davidson **Vice-President**  
30 Front St., Apt. 307, Stratford, ON Canada N5A 7S3  
lawrencedavidson@gmail.com

Christopher E. Dahle **Secretary/Treasurer**  
1401 Linmar Dr. NE, Cedar Rapids, IA 52402  
chris-dahle@biophilately.org

**Directors**

Jack R. Congrove (Washington)  
John Pereira (Massachusetts)  
Dr. Frederick C. Skvara (New Jersey)  
Donald P. Wright, Jr. (New Jersey)

**Publicity Director**

William Cochran  
9/30 William Street, Castlemaine, Victoria  
3450 Australia  
enquiries@philatelicedatabase.com

**Librarian**

Mark Reineke  
925 Boychuk Drive, Saskatoon, SK  
S7H 4L6 Canada  
mikadoate@sasktel.net

**Website**

**www.biophilately.org**

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

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

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

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

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

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

The term Scott and Scott Catalogue numbers are trademarks of Amos Philatelics, Inc., dba Scott Publishing Company.

**PLEASE NOTE: Material for the next issue should be in the hands of the Editor before 15 August 2016.**

### FROM THE EDITOR'S DESK

There was some confusion involved with mailing the last edition. Our Publisher inadvertently used the mailing list from 2015 instead of the current list. Therefore, some of our newer members did not receive their journal when it was published in late May and only recently did we catch the discrepancy and correct it. We apologize for any confusion.

Our Publisher, Dick Roman, has agreed to be the Associate Editor for Herpetology. His first column appears on page 223.

I will deal with a couple editorial issues now. You may have noticed that the code we use for list entries sometimes has an asterisk beside it. This is an artifact from the times when most stamp issues were printed in a single color and the editor used this device to note when an issue was printed in all of its natural colors. Because current stamps are almost always in full color, I have decided to discontinue this usage.

Sint Maarten versus Saint Martin. About 190 miles east of Puerto Rico lies a small, beautiful island in the Leeward Islands archipelago that is one of the few such places in the world under separate political administrations. The northern 60 percent of this island, known as Saint-Martin, is an overseas collectivity of the French Republic, while the southern 40 percent, known as Sint Maarten, is a constituent country of the Kingdom of the Netherlands.

Having visited this island, I can attest to the attractiveness of both sections. However, that is not the issue at hand. The postal administration on the Dutch side issues its own postage stamps and we see them imprinted with the name "Sint Maarten." If you were to look for this name in the *Scott Catalogue*, you would find that the index refers you to the listing under "Saint Martin." Probably the reason for this is that Saint Martin is the collective name given to the island as a whole and the one recognized by international convention. Because the French administration is not authorized currently to issue its own stamps, this is the convention we will follow in *Biophilately*.

Over the past two years we have featured articles about Charles Darwin and Alfred Russel Wallace. In this edition we begin a series of articles dealing with a third great naturalist of the 19th Century who had an influence on both of these men, Alexander von Humboldt. Dr. Lyman Caswell presents a case for identifying Humboldt as the world's first environmentalist.

Our Biology Unit is the second oldest study unit in the American Topical Association. Our members have published many of the ATA Handbooks and recently CDs, helping many to define their topics. Many members have received the Distinguished Topical Philatelist award, including Alan Hanks and Don Wright. The Biology Unit has funded publications of ATA, sponsored the Banquet at the annual meeting, and actively supports the ATA.

In the last election, Dale Smith was elected the President, Dawn Hamman the First Vice President and your editor the Second Vice President of ATA. Laurie Ryan is the ATA Secretary. Dick Roman, our Publisher and newly appointed Herpetology Editor was elected as a Director. Larry Davidson, Beth Collins, and Jeff Hayward also serve on the ATA Board and Chris Dahle was just appointed to fill a vacancy. All of us on the Board would like to encourage each Biology Unit member to join the ATA. To make it easy, a membership form is included in all mailed copies and easily accessible on our web site.

Jack R. 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 website ([www.biophilately.org](http://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

Greetings from a very hot Ontario, which my wife hates, but I do not mind. I find I have to back-track in to my last column with something I forgot to add. I had entered my Rhodesia exhibit in the 1989 ORAPEX show in Ottawa and while I was there, one of the club members said he would like to take it to PHILEXFRANCE, which was coming up in July and for which he was acting as Canadian Commissioner.

Needless to say, I was very pleased to comply and later in the year received a letter from Robson Lowe, the famous British philatelist and author complimenting me on the entry. I replied and said that I was planning on visiting the U.K. for the Stamp World London 90 show in May 1990.

Shortly after this, a further letter arrived inviting me to join him and some other of his friends for lunch on May 10th at the East India Club in St. James's Square in London. This was quite an honor, so I contacted a friend near London (actually a past girl friend) to see if she and her husband could put me up for a few days while I attended the show. She replied that they would be happy to see me, so I was all set.

I arrived in the U.K. on Sunday May 6th, rented a car, and drove out to Beaconsfield where they lived. I was made very welcome and we chatted for quite a while about old times. Sunday was a Bank Holiday, so spent the day visiting with Pat, Jon, and their two children. The eldest girl spent some time asking me about my early years in the U.K. and seemed intrigued to be talking to her mother's old boy friend!

Off to the show on Tuesday and it was much the same as such shows in Canada and the U.S. with some great exhibits and lots of dealers. I met Bill Maresch, who was a dealer from Toronto and several other acquaintances as I circulated round the dealer's tables, without much success. More of the same on the 9th and then on the 10th it rained, so I took shelter in the Underground, before walking up to St. James's Square. The luncheon was very good and there were several dealers and collectors from the States and South Africa, so there was plenty of philatelic conversation and I had a very entertaining afternoon.

I spent the next few days visiting places that I knew well and was not really surprised to see that little had changed, except that my local theatre was boarded up and the name of my school had changed. Then I said farewell to my hosts and thanked them for taking care of me before heading off to the airport for the flight home.

TOPEX 90 was being held at RIPEX XXV, the annual show of the Rhode Island Philatelic Society. This was good news for us, since the distance involved was smaller than usual. I just drove to Buffalo and then headed east on various expressways until we reached the sea. There were plenty of exhibits at the show—217 frames in all with 17 from junior exhibitors. There is one thing that had been bothering me for some time regarding exhibits at TOPEX shows and this is the appearance of some exhibits concurrently at several shows without any noticeable changes having been made. There does not seem to be any point in doing this.

There were several outstanding exhibits and at least four gold and seven vermeil medals (I did not mark all the scores in my catalog). My "Insects and Man" exhibit was awarded a silver and I guess I had some more hard work ahead of me.

Until next time...

*Alan J. Hanks*

---

### TRIVIA ANSWERS (from page 199)

1-b, 2-c, 3-b, 4-d, 5-c, 6-d, 7-a, 8-d, 9-c, 10-a

### STATE BIRD (from page 237)

Illinois, Indiana, Kentucky, North Carolina, Ohio, Virginia, West Virginia



## SECRETARY-TREASURER'S CORNER

### MEMBERSHIP ROSTER

Appended to this edition of the *Biophilately* journal is a table listing the names and address information for all of the current Unit members.

### ELECTIONS

As some of you may have already discovered when you attended the Biology Unit meeting at the APS StampShow in Portland, 4–8 August, the Unit should have had an election last year. This is entirely the fault of the Secretary who did nothing about it. Our last election was in 2013, and we are supposed to have elections every two years. So please accept my apologies for letting the Unit down. Unless I hear a request from the membership for an election, we will continue until 2017, and have another election at that time.

### NEW MEMBERS

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

1880	John Uicker, Severn, Maryland (joined during NY 2016)	flora & fauna, rabbits (1)
1881	Dan Weber, Milwaukee, Wisconsin	fish and their habitats in the lands of the Bible (6)

## NEWS OF NOTE

### ATA WEBSITES

The American Topical Association maintains a significant web presence. Here is a list of their websites and the information you can find at each one. The last two sites require member login.

#### **[www.americantopicalassn.org](http://www.americantopicalassn.org)**

The standard go-to-website for ATA members and for the general public. It has about 700 pages of information. Here you will find the listing of ATA checklists and handbooks, information about the National Topical Stamp Show and 400+ youth pages.

#### **[www.ATA-BecauseYouBelong.org](http://www.ATA-BecauseYouBelong.org)**

A members-only website. Here you will find the electronic issues of *Topical Time* from 2013 to present. Also where you can renew your membership electronically.

#### **[www.TopicalsOnLine.org](http://www.TopicalsOnLine.org)**

Stamp sales site where ATA members can post stamps for sale free of charge, and where members who buy receive a discount.

### ATA ELECTIONS

The American Topical Association, our parent organization, held elections for its officers and Board of Directors earlier this year. The new officers and board members were installed during a meeting at the World Stamp Show-NY 2016 in the Javits Convention Center on Friday, 3 June.

The Biology Unit is extremely well represented as members of this leadership group. Nine of the thirteen officers and board members are also members of the Biology Unit.

The new President is Unit member Dale Smith from Kansas City, Missouri. He previously filled the position of First Vice President. He is a retired pharmacist, who, with his wife Andrea, operates Stamp Smith, a topical dealership.

Dawn Hamman of Venice, Florida, was elected First Vice President. She chairs the publicity committee and is a member of the fundraising committee. She is also a Unit member and an award-winning exhibitor.



Dale Smith



Dawn Hamman

The new Second Vice President is Jack Congrove of Fort Lewis, Washington. In addition to being the editor of *Biophilately*, he also edits *The Federated Philatelist*, the newsletter of the Northwest Federation of Stamp Clubs, and *Air Mail Northwest*, the newsletter of the Northwest Chapter of the American Air Mail Society.

Unit member Laurie Ryan of Cincinnati, Ohio was reelected Secretary, a position she has held since 2008. Dennis Dengel of Poughkeepsie, New York, was elected Treasurer. He previously served as Second Vice President and is the only officer on the board who is not a Biology Unit member.

Other board members are immediate Past President Jack André Denys of Somerville, New Jersey; Beth Collins of Cottonwood, Minnesota; Larry Davidson of Stratford, Ontario; Jeffrey Hayward of Staten Island, New York; Robert E. Lamb of State College, Pennsylvania; Amanda Morgenstern of Pinckneyville, Illinois; and Dick Roman of St. Louis, Missouri.

Collins, Davidson, Hayward, and Roman are all members of the Biology Unit. Davidson currently serves as the Unit Vice President and Roman is the *Biophilately* Publisher and new Herpetology Editor. In addition our Unit Secretary, Chris Dahle, was just appointed to fill a vacancy that arose after the New York meeting.



Laurie Ryan

The participation by so many Unit members in the leadership of the ATA is evidence of the vitality and involvement of our study unit in the world of philately in general, and of topical collection in particular.

### BIOLOGY UNIT MEETING

The Biology Unit held a meeting at the APS StampShow in Portland on Saturday morning, 6 August. Attending were five Unit members: Larry Davidson (Ontario), Jack Congrove (Washington), Bea Vogel (Montana), Cathie Stumpenhause (Oregon), and Susan Setterberg (Washington) and one guest: William Slaninko (California).

Mr Slaninko is a microbiologist and your editor tried to convince him to join and provide a Microbiology column for *Biophilately*, but without success.

Jack Congrove presented a report on the actions of the ATA Board at their World Stamp Show meeting and the results of 2016 membership survey. Also included was a report on the financial and membership status provided by the Unit Secretary. Congrove mentioned some aspects of the new Manual of Judging including new award levels and exhibiting classes. There was some limited discussion. The members indicated they were generally pleased with the *Biophilately* journal.

### BIOPHILATELY EARNS LITERATURE AWARD

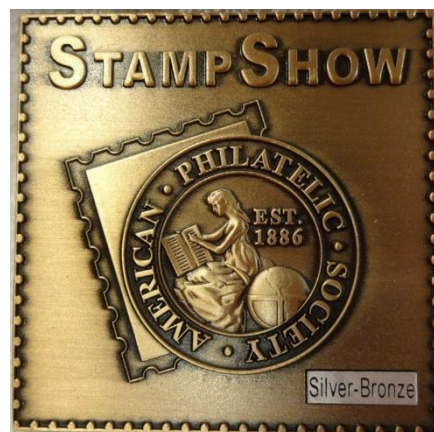
Your editor entered Volume 64 of *Biophilately* in the Literature exhibition at the APS StampShow held in Portland. The Unit journal received a Silver-Bronze award. The jury was composed of Daniel Warren (chief), Alan Warren, and James Graue.

The judges noted that the journal is useful for topicalists, especially the new listings. They recommended adding some illustrations to the listings to break up the monotony.

They found the layout and readability to be fine, but the balance was poor due to the predominance of the new issue listings.

Increasing the quantity of news and more substantive articles has been one of the goals that the editor has been working on. The addition of illustrations in the listings, however, is not a workable suggestion. Perhaps if the publication were solely via electronic media, this could be accomplished. But as a print publication, the quantity of pages in each volume is already near the economic limit.

You as a member can help improve the journal by submitting an article on a favorite item in your collection, or on any philatelic topic that relates to biology. Let us inspire our readers to want to collect our topic. Send your articles to the editor, [jackcongrove@comcast.net](mailto:jackcongrove@comcast.net).





## WORLD STAMP SHOW-NY 2016 REPORT

**Jack R. Congrove, BU1424**

The once every decade international stamp show held in the United States took place at the Jacob K. Javits Convention Center in New York City between 28 May and 4 June 2016. It was my pleasure to attend every day of this exhibition and I hope this report will provide a sampling of the many aspects of this show.

The exhibition occupied more than 300,000 square feet of space on the third floor of the center. In addition, there were 17 rooms on the first floor used for seminars, meetings, first day ceremonies, and presentations. With so many simultaneous events, it was not possible to do everything on the schedule.

At the opening ceremony, we were treated to a special guest appearance by none other than Alexander Hamilton. Hamilton is currently quite popular in New York not only because he is one of the city's favorite sons, but also due to the hit musical, *Hamilton*, currently playing on Broadway.

As some readers may know, I have an award winning exhibit with Hamilton as the subject. So, I was quite pleased to see him there and hear his remarks on how he was more responsible for the set up and operation of the post office department than his good friend Ben Franklin.

As with every stamp exhibition, the show could not operate without a corps of volunteers. Both Lisa Foster and I worked several hours as volunteers at the Youth and the Adult Beginner areas. Both locations were very well attended by visitors and were busy all day. I found it very rewarding to meet and assist new collectors with learning about stamp collecting.



With my friend Alex at WSS



Multitude of pictorial cancels at the USPS booth

The US Postal Service had a huge area that included games, free photo souvenirs, and of course, sales of stamps and other products.

There were seven first day ceremonies involving the issuing of 49 new US stamps during the show. In addition, the UN held two first day ceremonies and other postal administrations also held ceremonies and issued new stamps at the show.

There were long lines each day at the USPS booth to purchase stamps and have the various show cancels applied on covers that you could create yourself.

One of the fun activities that I did not expect I would enjoy so much was the quest to obtain stamps and

cancels in my philatelic passport. I managed to acquire 79 from the many postal administrations and organizations.

In addition to the USPS, there were dozens of other postal administrations. They were all doing very good business not only with servicing the passports, but also with many recent issues of their own. Canada Post got some of my money for their new Star Trek series.

Australia Post had a new butterfly souvenir sheet issue on each day. The cancelled version was only available at the show. Since this is one of my topics, they received a healthy amount from my wallet.

Not everything at the show was costly. There was lots of free stuff provided by many booth holders such as philatelic reference publications, souvenir items, and interesting promotional material.

Many booths had show souvenirs. At Mystic Stamp, you could get your photo with a rarity. Ashton Potter handed out free envelopes that you could use to make your own souvenir covers.



Butterfly items at Australia Post booth



Souvenir cover made with a free Ashton Potter envelope

There were interesting and unique displays all around the exhibition. Many of the world's greatest philatelic rarities were there. I personally saw the One-Cent British Guiana, the Swedish Treskilling Yellow, the Hawaiian Dawson cover, and many others. There were at least seven copies of the Inverted Jenny at the show, two of which were involved in auctions. There was probably one billion dollars-worth of philatelic material in that hall.

Other less valuable, but just as interesting displays included John Lennon's boyhood stamp album and an actual Curtiss JN-4H aircraft on loan from the Old Rhinebeck Aerodrome in Dutchess County, New York.

I was unable to attend every first day ceremony, but I did make it a point to go to the one for the UN Peacekeepers stamp because in my former career I served as a UN Peacekeeper in the Middle East. I took the opportunity to prepare some of my own cachets and had them serviced by the UN Postal Administration there.

The most interesting first day ceremony for me was the double issue for the "View of Our Planets" and "Pluto Explored" sheets. Remarks were made by a stellar group of NASA scientists including Dr. Alan Stern, the principal investigator of the New Horizons space probe that continues to send remarkable photos of the former ninth planet and its moons.

There were more than 30 auction firms at the show, five of which conducted auctions there. The highlight was the sale of one of the Inverted Jenny stamps for \$1.35 million including the buyer's premium. Yes, I got to see the stamp close up.

More than 120 dealer booths offered everything from inexpensive covers to million dollar rarities. I noted that most dealers were very busy on all days. At one booth dealing in covers, they had to add a second row of chairs in the aisle to accommodate all the customers.

Philatelic societies of all types were well represented. I spent some time at the American Topical Association booth and they always had visitors many of whom came to get their passports serviced. During the show, the ATA managed to recruit an unprecedented 78 new members despite being located in the back section of the hall. Much of this effort was due to the work of one of our own Biology Unit members, Jeffrey Hayward. Jeff, who lives on Staten Island (a part of New York that he cautioned is in no way related to Manhattan), served as the local point of contact. He organized the ATA booth and helped man its operation every day.



John Lennon's stamp album



The ATA did not hold its regular National Topical Stamp Show this year because of the World Stamp Show, so it used this show to hold its annual Board meetings and general membership meeting. The membership meeting was on Friday, 3 June at 1:00 PM. During this meeting, the incoming new officers and board members were sworn in.



ATA Board swearing-in ceremony

L to R: Robert E. Lamb, Director; Jack Congrove, 2nd Vice President; Dawn Hamman, 1st Vice President; Amanda Morgenstern, Director; Vera Felts, Executive Director; Dale Smith, President; Laurie Ryan, Secretary; Beth Collins, Director; Larry Davidson, Director; Jack André Denys, Past President; Jeffrey Hayward, Director, and Dick Roman, Director.  
Not present: Dennis Dengel, Treasurer

The new President is Dale Smith from Kansas City, Missouri, formerly the First Vice President. Dawn Hamman of Venice, Florida, was elected First Vice President and yours truly was elected as the Second Vice President. Laurie Ryan of Cincinnati, Ohio, was re-elected as Secretary. Dennis Dengel of Poughkeepsie, New York, was elected as Treasurer. The general meeting was very well attended. Our Unit Secretary-Treasurer, Chris Dahle, received his 25-year ATA membership pin there.



Dr. Läge describing exhibits

The meeting ended with an excellent and witty presentation by Dr. Damian Läge, an international philatelic judge from Germany, about making a thematic exhibit. After this presentation, Dr. Läge led a tour of the thematic exhibits and described the positive and not so positive exhibiting techniques.

In a first for any international show, the American Postal Workers Union had a booth where they promoted support for some of their labor causes including a return of the philatelic sales windows.

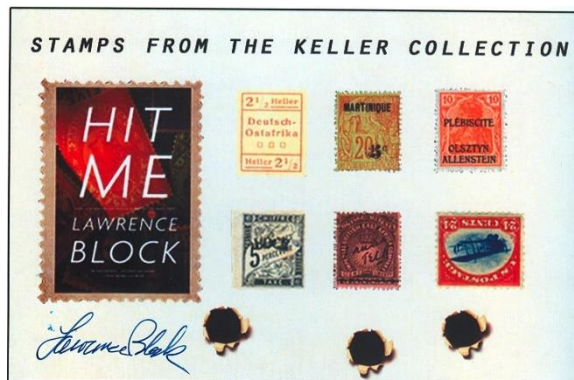


Chris Dahle receiving his 25-year pin from Executive Director, Vera Felts

During the show, there were society meetings, seminars, and presentations on all sorts of philatelic subjects including exhibiting, postal history, thematic collecting, and many others.

In addition to these, one event that I particularly enjoyed was a presentation by award winning mystery writer Lawrence Block on "A Hit Man and His Stamps." Block gave an entertaining and humorous description of the genesis of the hero of several of his novels, Keller, a contract killer who takes jobs in order to get money to buy stamps to add to his collection.

One of the most memorable events at the show was the news conference on 2 June at which position 76 of the stolen McCoy Inverted Jenny block was returned to the American Philatelic Research Library. I am sure that the mystery of how this stamp ended up in Northern Ireland will fascinate philatelists for years. It was a privilege to witness its return by the FBI.



Souvenir card from Lawrence Block

Of course it would not be an "exhibition" without exhibits. I was unable to view each of the more than 4,100 frames of competitive exhibits. I tried to concentrate on the classes that were of most personal interest: Thematic, Youth,

and Open. Many of the Traditional exhibits were so esoteric that you had to be expert in the particular area to really appreciate them.

The Open and Modern classes were presented for the first time at an international show. Also, there was an Illustrated Mail (first day covers) category that was not an official class, but was offered on an experimental basis.

The top three honors all went to Traditional or Postal History exhibits. Grand Prix d'Honneur: Alvaro Castro-Harrigan from Costa Rica for "Panama: First Issues as a State of Colombia and Their Forerunners."

Grand Prix International: Wei Gang from China People's Republic for "China: The Postal History of Mongolia 1841-1921."

Grand Prix National: Gordon Eubanks for "The United States Imperforate Issues of 1851-1856 & Their Importance in an Expanding Postal System."

In the Thematic class, there were several exhibits with a biological subject. The top award among these was "Pigeons-Great Diversity in the Wild-Domesticated and Admired by Man," by Lutz König of Germany. It received a Large Gold with



Lesley Marley with her exhibit

a score of 96 out of 100. Close behind it was "A Whale's Tale," by Lesley Marley from UK. It also received a Large Gold with a score of 95.

Gold awards went to "The Palm, a Royal Plant," by Giovanni Licata of Italy with a score of 93; "Hunting: Necessity, Sport, or Extermination?" by Ruth Ordoñez Sanz of Spain (91); "Flower Magic," by Linda Lee of Australia (90); and "Liquid Life: Blood from an Ancient Myth to a Modern Medicine," by Peter Weir from UK (90).

"The Coconut Palm," by Phillip Stager of Florida received a Large Vermeil award with a score of 85. Vermeil awards went to "The Butterfly Effect," by Greg Herbert of Maryland (82) and "Dog," by Guolzang Zhang of China (80).

In the Youth class, the highest award was Large Vermeil. These were won by "The Rooster of Decaris Issue," by Tanguy Pron of France; "Visit to the Farm," by Harold Fernandez of Cuba; "The Bear's Family," by Laure Michiels of France; and "My Friend's Dog," by Daiana Aylen Casielles of Argentina.

Not all of the show was fun and games. There were serious problems with the new style display frames. They are much lighter than the current frames, which is an advantage. But the lightweight construction makes them flimsy and subject to warping and splitting of the windows. Some WSP shows cancelled their orders for the frames as a result.

The Javits Center being under union operation tried to charge all of the booth holders additional fees for using union workers to move their material into and out of the hall. These fees were all in the five figure range and came as a complete surprise to the dealers and auction houses.

Negotiations took place between the booth holders and the show organizers with the result that the booth holders were not charged these fees. But I suspect that someone had to pay the union and that would most likely be the show organization. This would certainly have an adverse effect on any show profits.

The next international show in the US is planned for Boston on 23-30 May 2026. That year will mark the 250th birthday, or sesquicentennial, of the United States. I predict that there will be a plethora of Americana related stamp issues by multiple postal administrations.

I hope to see you there.



New York FBI Assistant Director Diego Rodriguez thinking, "I'm holding a quarter million dollars in my hands."



Souvenir stamp from Boston 2026

## NON-MACHINABLE SURCHARGE RATE STAMPS

Jack R. Congrove, BU1424

According to Section 133 in the United States Postal Service (USPS) Domestic Mail Manual for First-Class mail prices and fees, there is an additional fee charged for mail pieces that cannot be processed in the automated sorting machinery. This non-machinable surcharge is added per piece and applies to letter-size pieces that have one or more of the following characteristics:

1. Has an aspect ratio (length divided by height) of less than 1.3 or more than 2.5.
2. Is polybagged, polywrapped, enclosed in any plastic material, or has an exterior surface made of a material that is not paper. (Not applicable to windows in envelopes made of paper.)
3. Has clasps, strings, buttons, or similar closure devices.
4. Contains items such as pens, pencils, keys, or coins that cause the thickness of the mail piece to be uneven; or loose keys or coins or similar objects not affixed to the contents within the mail piece.
5. Is too rigid (does not bend easily when subjected to a transport belt tension of 40 pounds around an 11-inch diameter turn).
6. For pieces more than 4¼ inches high or 6 inches long, the thickness is less than 0.009 inch.
7. Has a delivery address parallel to the shorter dimension of the mail piece.
8. Is a self-mailer (folded paper sheets) that is not prepared according to specified requirements.
9. Is a booklet (bound paper sheets) that is not prepared according to specified requirements.

At the current rate, effective since 10 April 2016, this non-machinable surcharge is 21 cents for stamped letters weighing not over one ounce. Added to the one-ounce first-class letter rate of 47 cents, the surcharge makes the total cost for mailing such a piece 68 cents. This also happens (not coincidentally) to be the cost for mailing a regular two-ounce first-class letter.

Beginning in 2010, the USPS has issued a series of stamps that meet this non-machinable total fee for a one-ounce letter. One of the reasons that these stamps became necessary is that greeting card manufacturers began producing cards in square shapes instead of the traditional rectangular shapes that were historically common. This shape violated rule number one in the above characteristic listing.

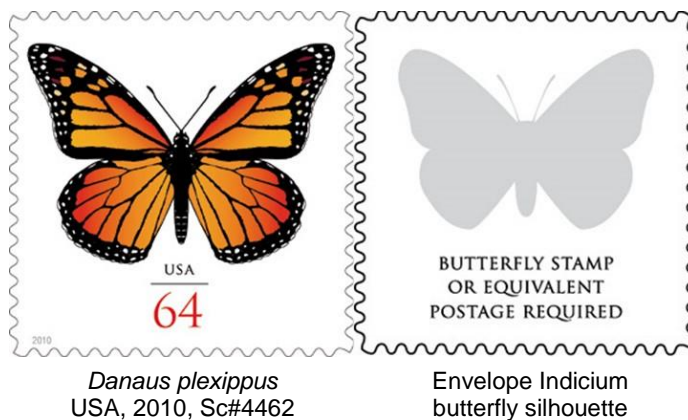
I am not sure why these square-shaped cards have become so popular, especially since you have to pay more to send them. Perhaps it is because they were fashionable for wedding announcements. And now they are available for Christmas greetings and every other holiday.

**64c.** The first stamp design in this series was released on 17 May 2010, at the National Stationery Show in New York City. At that time, the one-ounce first-class letter rate was 44 cents and the surcharge was 20 cents. This rate had been in effect since 11 May 2009.

The 64c stamp pictured a Monarch Butterfly and was intended primarily for use on the square greeting card envelopes; thus the release at the Stationery show.

As part of this arrangement, participating card manufacturers were to print a silhouette image of a butterfly on their envelopes, making it easy for customers to understand they needed the new butterfly stamp, or equivalent postage, to mail the card.

The USPS chose the butterfly as a symbol for use on all future stamps for non-machinable letters. The USPS planned to issue a new butterfly design for this stamp whenever postal prices increased.





The Greeting Card Association recommended to its members that all square envelopes and those that fell within the non-machinable letter category carry the Butterfly stamp icon in the upper right-hand corner, thus making it easier for mailers to determine the postage for these types of greeting cards and invitations.

The Butterfly stamp icon carries text that reads: "Butterfly Stamp or Equivalent Postage Required." This implies that mailers should use either the Butterfly stamp, or postage totaling its value.

The dimensions of the Butterfly stamp are 1¼"×1¼" and the Butterfly stamp icon measures 1½"×1½". This size differential allows the stamp to completely cover the icon. The USPS also specified that the icon should be placed 3/16" from the top and right edges of the envelope, thus allowing room for placement of the stamp.

So far, all five stamp images in this series have been created by artist Tom Engeman of Bethany Beach, Delaware. He created the designs on a computer using images of preserved butterflies as a starting point. The results are a highly stylized, simplified image of the species rather than an exact replica.

Graphic artist Derry Noyes, art director for the USPS stamp program, incorporated Engeman's artwork into the stamp design. She also served as the art director and the typographer for the project.

The 64c stamps were gravure printed by Avery Dennison. They produced an initial print run of 20 million stamps on pressure-sensitive self-adhesive paper. Colors used in the printing were cyan, magenta, yellow, black, cool gray, and orange. Plate numbers in the four corners of the 20-stamp panes include the letter "V" to identify Avery Dennison as the printer followed by six single digits, one for each print color. They are serpentine die cut 10½.

The adhesive used on the paper for these stamps is not water-soluble, which makes them almost impossible to remove from envelopes. Most collectors save the used stamps on piece, by trimming the excess paper close to the stamp without cutting into the stamp design.

The Monarch butterfly (*Danaus plexippus*) has appeared previously on several US stamps and dozens of stamps from other countries. Its first US appearance was on a 1987 stamp (Sc#2287) commemorating North American wildlife. In 1999, both the adult and larva were depicted on stamps from the "Insects and Spiders" sheet.

This butterfly has also made secondary appearances on the "1990s Celebrate the Century" sheet (Sc#3191) and the State Flag stamp for Ohio (Sc#4314).



*Danaus plexippus* (larva & adult)  
USA, 1999, Sc#3351j & k

The Monarch is one of the most common and well-known butterflies found in North America. Its larvae feed on milkweed, which impart poisonous characteristics in both larvae and adults and cause predators to avoid them.

The Monarch is notable for its annual migration from the US and southern Canada to Mexico and southern California, which covers thousands of miles. Though not currently listed on any endangered lists, it is threatened by loss of habitat.

**65c.** The second stamp in this series was issued in Baltimore, Maryland, on 20 January 2012. This stamp was necessary to pay the new first-class letter rate that rose to 45 cents on 22 January. The surcharge remained at 20 cents, so the new denomination increased to 65 cents. This amount also paid the first-class rate for two-ounce letters.

Tom Engeman and Derry Noyes again teamed up to produce the design, which shows a stylized Baltimore Checkerspot butterfly (*Euphydryas phaeton*).

The stamps were gravure printed by Avery Dennison with an initial print run of 15 million again on pressure-sensitive self-adhesive paper of the same type as before. The colors used were gray, black, and two shades of orange. The plate numbers include the letter "V" followed by four single digits, one for each color. The stamps are serpentine die cut 10¼ in panes of 20. Again these stamps are not soakable.



*Euphydryas phaeton*  
USA, 2012, Sc#4603

The Baltimore Checkerspot butterfly previous appeared on a US stamp as one of the block of four in the Butterfly issue of 1977 (Sc#1713).

Like the Baltimore Oriole, the Baltimore Checkerspot is named after George Calvert, Lord Baltimore, who helped found the colony of Maryland, because the colors on its wings resemble those on Calvert's coat of arms.

Since 1973, the Baltimore Checkerspot has been the official insect of the state of Maryland. A medium-sized butterfly with a wing span of 1¾ to 2¾ inches, it ranges from southern Canada to Georgia, and may be found as far west as Nebraska. Its orange and white spots form a checkered pattern on its black wings. It is often found in wet meadows where its primary food plant, the turtlehead, grows.



*Euphydryas phaeton*  
USA, 1977, Sc#1713

**66c.** The third stamp in the non-machinable series was issued in Pine Mountain, Georgia on 23 January 2013. This stamp became necessary due to the first-class mail rate increase to 46 cents that took effect on 27 January. The surcharge continued to be 20 cents, so the combined rate increased to 66 cents. This was also the two-ounce rate.

The same design team was involved in creating this stamp as the two previous stamps. By this time, Engeman had moved to Frederick, Maryland. This stamp depicts a stylized view of a Spicebush Swallowtail butterfly (*Papilio troilus*).

The stamps were gravure printed by Avery Dennison with an initial print run of 80 million stamps, a significant increase over the two previous issues. The printer used pressure-sensitive, self-adhesive paper of the same type as before.

The colors used were teal, cool gray, yellow, orange, green, powder blue, and black. The plate numbers on each corner of the pane include the letter "V" followed by seven single digits, one for each color. The stamps are serpentine die cut 10% in panes of 20. Again these stamps are not soakable. A total of 2,500 each die cut and imperforate uncut press sheets of 200 were also sold.



*Papilio troilus*  
USA, 2013, Sc#4736

The Spicebush Swallowtail has not appeared on any previous US stamps, but ten other countries have issued stamps with an image of this species including a 1998 souvenir sheet from Burkina Faso.

This species is found usually in the eastern US and southern Ontario, but occasionally strays as far as the American Midwest, Cuba, Manitoba, and Colorado. The only way one could end up in Burkina Faso is pinned to a tray.



*Papilio troilus* (larva)  
photo ©2006 Derek Ramsey

Both as larvae and adults, these butterflies hide from their predators in plain sight. They do this by mimicking other creatures or their surroundings. The caterpillar later morphs into what looks like a small green snake, with yellow and black markings that resemble a snake's eyes and a false forked tongue. The butterfly's chrysalis mimics a dried brown leaf, complete with veins.



*Papilio troilus*  
Burkina Faso, 1998, Sc#1112

**70c.** The fourth stamp in this series was issued in Kansas City, Missouri on 10 February 2014. The design change was to accommodate another first-class rate increase effective on 26 January 2014. This time not only did the one-ounce rate increase by 6.5 percent to 49 cents, but also the surcharge went up one penny to 21 cents. This made the combined non-machinable total exactly 70 cents.

The design team of Engeman and Noyes produced another stylized view, this time of the Great Spangled Fritillary butterfly (*Speyeria cybele*). The stamps were gravure printed by CCL Label, Inc. with an initial print run of 60 million stamps. CCL Label had acquired the Avery Dennison business during the previous year and assumed its printing contracts with the USPS.

These stamps used pressure-sensitive, self-adhesive paper of the same type as before. The colors used were brown, light brown, dark yellow, dark orange, orange, cool gray, and black. The plate numbers on each corner of the pane include the letter “C” followed by seven single digits, one for each color. The unsoakable stamps are serpentine die cut 10¼ in panes of 20. A total of 2,500 each die cut and imperforate uncut press sheets of 200 were also sold.

The Great Spangled Fritillary previously appeared on a 1991 US National Wildlife Federation cinderella stamp, but not on any regular issues. At least seven other countries have issued stamps depicting this species including our old friend Burkina Faso.

The Great Spangled Fritillary is named for the silvery spots found on the undersides of its wings. A large butterfly with a wingspan of 2¼ to 4 inches, it is found in all northern states and ranges as far south as northern Georgia in the east and central California in the west. It is rarely found in the central United States. Even though this butterfly is a common sight in much of the country, it can be puzzling to identify. Not only are females slightly darker than males, but individuals in eastern populations are more orange in color, while those in western populations are browner.

Although their markings may vary, all Great Spangled Fritillaries have one thing in common: A very close relationship with violets. Females lay their eggs on or near clumps of violets in August or September. When the eggs hatch, the larvae crawl to nearby violet plants where they hide among fallen leaves and begin to hibernate. When spring arrives, the caterpillars come out of hibernation and feed on fresh violet leaves before forming a chrysalis and transforming into adults.

Male Great Spangled Fritillaries emerge slightly before females do, starting in early summer. After mating in June or July, the males die. The females have long lives for butterflies, often surviving into October, when their frayed wings show their age. Strong and fast flyers, adult butterflies visit a wide range of flowers to feed on nectar. They are most often spotted in open habitat such as meadows, pastures, and prairies.

(71c). The latest stamp in our non-machinable series was issued on 1 June 2015, in Kansas City, Missouri. The design of this stamp differs from each of the previous members of this series in that it is non-denominated. Instead of a face value, the design includes an indicium “NON-MACHINEABLE SURCHARGE” to indicate its usage value. Like a regular Forever® stamp, this stamp will always be valid for the rate printed on it. The initial price and value was 71 cents. This amount paid the one-ounce first-class rate of 49 cents plus an increased surcharge amount of 22 cents that went into effect on 31 May 2015.

Engeman and Noyes again created a stylized design depicting the Eastern Tiger Swallowtail (*Papilio glaucus*). The stamps were offset printed with added microprint by Ashton-Potter (USA) Ltd. of Williamsville, New York, with an initial print run of 100 million stamps. This large quantity probably reflects the assumption that with the non-denominated indicium, there would be no need to replace the design for a long period.

This view was borne out in April 2016, when the USPS reduced the cost of a first-class stamp to 47 cents and the non-machinable surcharge to 21 cents.

These stamps used the same pressure-sensitive, self-adhesive paper. The colors used were black, cyan, magenta, yellow, and purple. The plate numbers on each corner of the pane include the letter “P” followed by five single digits, one for each color. The unsoakable stamps are serpentine die cut 10½ in panes of 20. A total of 250 die cut and 500 imperforate uncut press sheets of 200 were also sold.



*Speyeria cybele*  
USA, 2014, Sc#4859



*Speyeria cybele*  
Burkina Faso, 1998, Sc#1108e



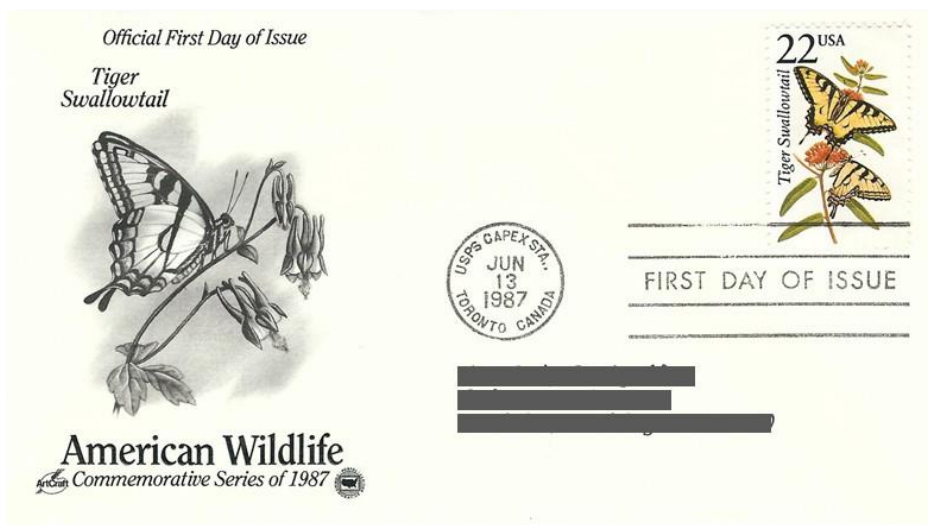
*Papilio glaucus*  
USA, 2015, Sc#4999



The Tiger Swallowtail previously appeared on a US stamp in 1987 on the North American Wildlife sheet of 50 (Sc#2300). Because of its striking appearance and large size, it has also been a popular design for stamps from other countries having been depicted on more than 50 different issues of authorities from Angola to the United Nations.

Named for the black “tiger” stripes along the upper surfaces of its wings, the Eastern Tiger Swallowtail is easily spotted. Abundant from southern New England to Florida and west to the Great Plains and central Texas, this butterfly is a frequent visitor to gardens, woodlands, and riverbeds.

The specimen depicted on the non-machinable stamp is female identified by the conspicuous band of blue spots along the hindwing. The male, as shown on the wildlife stamp, does not have this blue band.



## Stamp Smith

### TOPICAL STAMPS & COVERS

U.S. stamps,  
worldwide  
& covers.

Send us your  
want list or visit  
our eBay store,  
Stamp Smith  
Stamps.

1212 NE 96th Terrace  
Kansas City, MO 64155

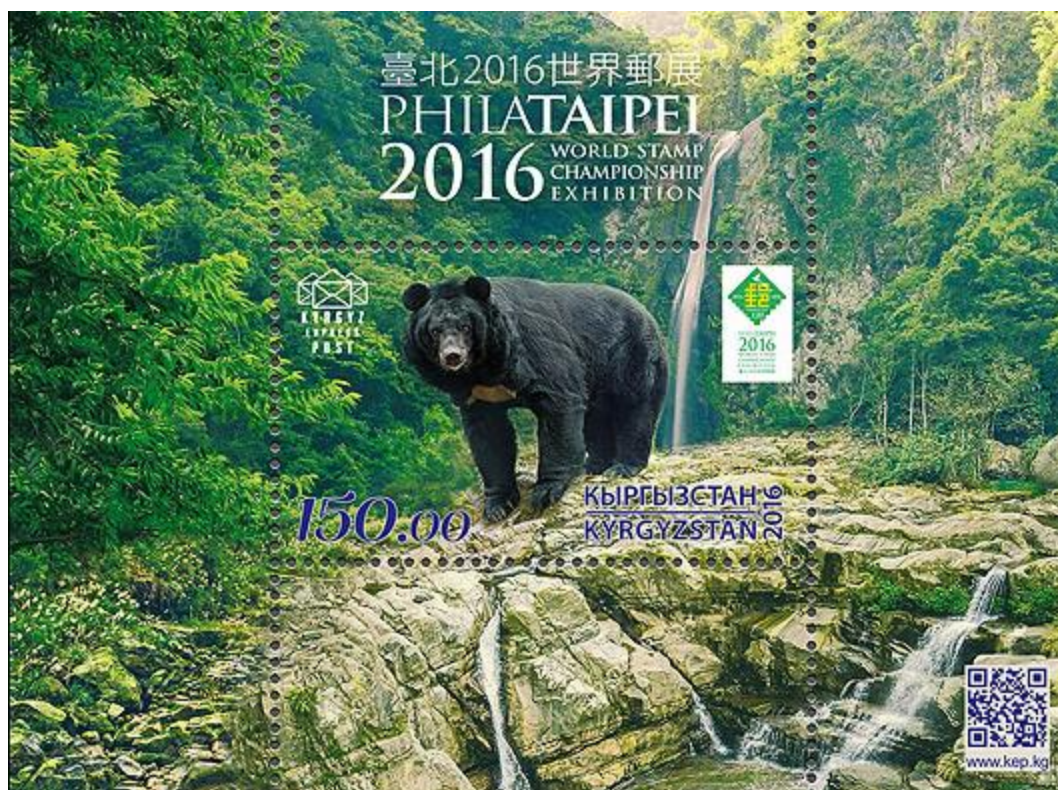
Tel: 816.734.4536  
Email: [smldale@umkc.edu](mailto:smldale@umkc.edu)

## NEW WILDLIFE ISSUES

On 3 June 2016 at WSS-NY 2016, Kyrgyz Express Post issued two new wildlife souvenir sheets to commemorate international stamp shows being held in 2016.



Bald Eagle (*Haliaeetus leucocephalus*) over New York City Skyline  
(with WSS-NY 2016 logo)



Formosan Black Bear (*Ursus thibetanus formosanus*) in Forest Scene with Waterfall  
(with PhilaTaipei 2016 logo)

One sheet was for WSS-NY 2016 itself and the other was for Phila Taipei 2016 to be held on 21–26 October in Taipei, Taiwan.

Kyrgyz Express Post is a limited liability private company that has been granted official status as a postal operator in Kyrgyzstan. It is not exactly clear why the country needs two postal operators.

Their official status, confirmed by the Universal Postal Union allows them to issue postage stamps

The designer of both sheets was Aliona Cojocari.

They were printed by Nova Imprim using full-color offset lithography plus a partial gloss finish.



## ALEXANDER von HUMBOLDT: THE FIRST ENVIRONMENTALIST

Dr. Lyman R. Caswell, Washington

[Ed. Note: This is the first installment of a four-part article on the life of Alexander von Humboldt. Dr. Caswell is a retired chemistry professor who has an award winning exhibit on von Humboldt. He is a Director in the Society for Hungarian Philately and also a founding director of the Seattle Philatelic Exhibition.]

### Introduction

At two o'clock in the afternoon on 5 June 1799, the corvette *Pizarro* dodged the English blockade and sailed from Coruña, a port in northwest Spain. Although the *Pizarro* was a warship, it carried two civilian passengers, two eager young men who had abandoned their careers to fulfill a dream of becoming explorer scientists.

Prussian Baron Alexander von Humboldt (Fig. 1) had left his career as a mining engineer. His companion, French botanist Aimé Bonpland (Fig. 2), was a former military surgeon. Humboldt and Bonpland had met at the home of French botanist Jean-Nicolas Corvisart in Paris. They decided to embark together as naturalists on a journey of exploration.

Alexander von Humboldt, born in 1769, had been interested in science from his boyhood. His interest in faraway places had been influenced by his favorite boyhood book, *Robinson Crusoe*.

As a boy living at Schloss Tegel (Fig. 3), the family estate near Berlin, he wandered about the estate, collecting leaves, insects, and rocks that fascinated him. He took them home to identify them and form collections. His father encouraged these interests.

Alexander's desire to become a scientific explorer was inspired by his acquaintance with Johann Georg Forster (Fig. 4), whom he met at the University of Göttingen.



Fig. 4. Forster  
DDR, 1979, Sc#1998



Fig. 1. von Humboldt  
Berlin, 1959, Sc#9N155



Fig. 2. Bonpland  
Argentina, 2008, Sc#2483



Fig. 3. Schloss Tegel Cachet Cover

Forster had sailed with Captain James Cook on Cook's second voyage of scientific exploration, and had written a best-selling book about the voyage. In the spring of 1790, Humboldt and Forster traveled down the Rhine River together, collecting botanical and mineralogical specimens and observing agriculture and industries along the river. As a result of this journey, Humboldt published his first scientific paper, which dealt with the basalt deposits along the river. Forster's influence was the deciding factor in leading Humboldt to decide to be a scientific explorer.

Aspects of Humboldt's education prepared him to be the first environmentalist. At the age of seventeen, he studied drawing at the Berlin Academy of Art. This training enabled him to prepare accurate illustrations of his observations, and of the specimens he collected. He pursued his interest in science in 1789–90 at the University of Göttingen, where he studied physics and mathematics. Humboldt studied geology and mining engineering at the *Bergakademie Freiberg* (Freiberg Mining Academy) (Fig. 5) in Saxony in 1791–92. He graduated in 1792 with certification as a mining engineer.



Although he had completed his education, Humboldt could not yet begin journeys of exploration. He was subject to his mother's will, that demanded that her sons be employed in the Prussian Civil Service. Accordingly, he accepted a Civil Service appointment as Inspector of Mines, and made tours of mine inspection throughout the Kingdom of Prussia.

Humboldt's mother died in 1796, leaving him a wealthy man. He promptly resigned his Civil Service job and began a time of wandering.

### Wanderlust

In March 1798, after a year of wandering through central Europe, Humboldt arrived in Paris. He met various scientists and tried to persuade one or another of them to accompany him on a voyage to North Africa. This idea was frustrated by the French Revolutionary War. He made a proposal to French navigator and explorer Louis Antoine de Bougainville for a voyage to the South Pole, but Bougainville was not interested. He finally found a worthy companion for such a journey when he met Bonpland.

Aimé Bonpland was born in 1773 in La Rochelle. He studied medicine, but he preferred to concentrate on botany. Like Humboldt, he yearned to be a naturalist-explorer.

In Paris, Humboldt purchased equipment for making scientific measurements during his travels. These included barometers, thermometers, table sundials, and surveying equipment. He and Bonpland spent two months in Marseilles attempting to find passage to Egypt, but were unsuccessful because of the ongoing war.

At the end of December 1798, they departed for Spain, with the hope of making explorations in Spanish America. In March 1799, Humboldt applied in person to King Carlos IV of Spain for permission to embark on a journey of exploration in Spanish America. He proposed to study the biological and mineral resources of the Spanish territories and prepare a report on them for the King.

The King granted his permission, but required Humboldt to pay the expenses of his explorations. Humboldt agreed to these terms, which were softened by the grant of a passport that required officials in all places he visited to give him their support and provide for his needs. This passport enabled Humboldt and Bonpland to travel on Spanish warships. Thus began the five-year exploration of



Fig. 5. Freiberg Mining Academy Bicentennial First Day Cover  
DDR, 1965, Sc#796-99

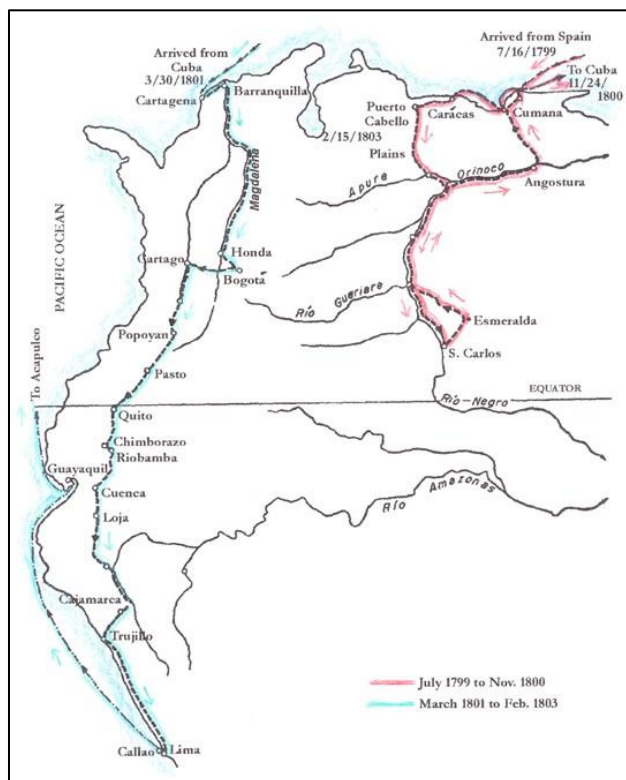


Fig. 6. Map of Humboldt's Travels in South America

the Americas, which led to Humboldt's reputation as a great environmental scientist. The map (Fig. 6) shows the routes of Humboldt's travels in South America.

### The Canary Islands

On 17 June 1799, the *Pizarro* arrived at the Canary Islands, where the travelers spent several days, immersed in the study of the unique flora of the islands. Humboldt later produced the first published study of these plants (Fig. 7).

As a geologist, Humboldt was interested in volcanoes. The travelers went to Tenerife, site of the highest volcano in the Canary Islands. Upon arrival, Humboldt and Bonpland presented their passport to the governor of the island, who provided them with lodging during their stay.

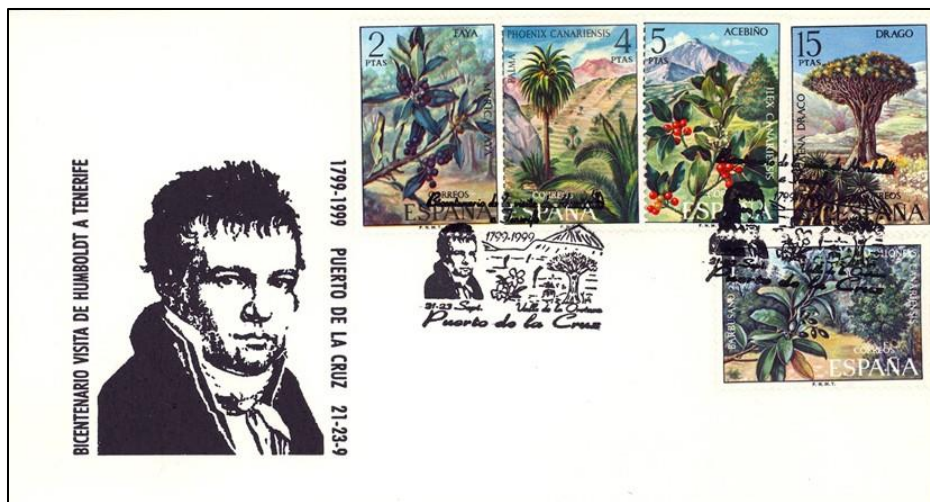


Fig. 7. Cachet & Cancel for Bicentennial of von Humboldt's Visit, 1999  
Spain, 1973, Sc#1747-51

Humboldt and Bonpland ascended Pico del Teide (Fig. 8), the highest mountain in the Canary Islands, and the fourth largest volcano on earth, considering its height above the ocean floor. Humboldt was impressed by the changes in plant species as the altitude changed, warm-climate plants at the base of the mountain, and tundra plants near the summit. In addition to collecting herbarium specimens during the climb, Humboldt also measured temperature and pressure changes with altitude, and collected rock samples.



Fig. 8. Pico del Teide  
Spain, 1966, Sc#1358

### Venezuela

The travelers re-embarked on the *Pizarro* on 25 June 1799, and sailed for South America. On the morning of 16 July 1799, Humboldt and Bonpland entered Cumaná, in the Captaincy-General of Caracas (now Venezuela). The captain of the *Pizarro* introduced them to the governor of the province of New Andalusia, who provided them hospitality.

Humboldt and Bonpland employed a native, "Don Carlos del Pino," who accompanied them throughout their travels in South America. They explored the region around Cumaná, visiting the local missions, an old gold mine, and studying the Guaymas Indians. One night they observed a strong lunar halo.

During their stay in the vicinity of Cumaná the travelers visited the Guácharo Cavern (Fig. 9), and learned about the Guácharo birds (*Steatornis caripensis*) (Fig. 10). These strange birds roost in the cavern during the day, and fly at night to feed, making an extremely raucous noise. The Guácharo birds are also called "oilbirds," because the Indians harvest them and render their flesh for cooking oil.



Fig. 10. Guácharo  
Venezuela, 1982, Sc#1270



Fig. 9. Guácharo Cave  
Venezuela, 1982, Sc#1257

In addition to his interests in botany and geology, Humboldt was also interested in the agricultural productions of the lands that he visited, and their contributions to the local economy. Humboldt and Bonpland inspected a plantation of 254,000 cacao trees (*Theobroma cacao*), the source of chocolate (Fig. 11).



While they were in the area, the travelers observed a solar eclipse on 28 September 1799. On 4 November, they experienced their first earthquake. The superstitious local people said that the lunar halo of the previous month was an omen that predicted the earthquake.

On 18 November, the travelers sailed from Cumaná to La Guaira, the seaport of Caracas. From La Guaira they went overland to Caracas.

During December, Humboldt and Bonpland explored the environs of Caracas, collecting plant specimens in the Higuerote Mountains and in the Aragua Valleys. Their guide during these activities was a student at Caracas University named Andrés Bello.

On New Year's Day 1800, Humboldt and Bonpland began the ascent of *La Silla* ("The Saddle"), a mountain just outside Caracas. They attained the peak, at 9,022 feet, on the following day. Along the way, they collected plant specimens, and noticed the variation of species with altitude, as they had at the Pico de Teide. Young Bello accompanied them part way, but discovered that his stamina did not match theirs, and gave up part way up the mountain. Their desire to climb a mountain puzzled the Caraqueños, who had never before heard of such a thing, but who watched the ascent with telescopes.

Humboldt and Bonpland departed from Caracas on 7 February 1800. They traveled south, collecting specimens and enjoying the hospitality of estancias along the way. On the road from Turmero to Maracay, they inspected the Samán de Güere tree (*Albizia saman*) (Fig. 12), which had a circumference of twenty-eight feet. This tree still stands today and is a national treasure in Venezuela.

Near Puerto Cabello, the travelers came on 1 March to the shore of Lake Valencia, where they stayed three days at the Hacienda de Bárbula. The local people told Humboldt that the lake level had sunk since the area was first settled. They believed that there was a "slow leak" in the bottom of the lake, but they did not know what the lake was "leaking" into. They also told him that the area had formerly been thickly forested, but the forests had been cleared to create farmland.

Humboldt pointed out that trees draw up moisture through their roots and transpire it into the air through their leaves, making forests humid, but plowed land does not do this. The loss of the forests had made the local climate drier. Lake Valencia was not slowly leaking. It was evaporating, he said. Humboldt also pointed out that forests anchor the soil. Clear cutting a hillside made it vulnerable to sliding when it became saturated with water from a heavy rain.

From Lake Valencia, the travelers set out on the Venezuelan *Llanos* (plains). They continued south and arrived on 27 March at Villa de San Fernando Apure, a Capuchin mission, on the bank of the Apure River. On the Apure River, Humboldt made his first observation of electric eels (*Electrophorus electricus*) (Fig. 13). He was the first person to dissect one and describe its physiology. Later, on the Orinoco, he was stung by an electric eel. It took him two days to recover.

[to be continued in the next edition]



Fig. 11. Cacao Pods  
Venezuela, 1937, Sc#313



Fig. 12. *Albizia saman*  
Venezuela, 1969, Sc#C1011



Fig. 13. *Electrophorus electricus*  
Guyana, 1980, Sc#317c

## FACT

Having blue eyes is actually a mutation. Before the mutation occurred, all human beings had brown eyes.



## WINGED JEWELS

Raymond W. Ireson, FRPSC



*Eulampis jugularis*  
1992, Sc#1649



*Eulampis holosericeus*  
1976, Sc#469



*Calliphlox evelynae*  
1989, Sc#670



*Orthorhyncus cristatus*  
1976, Sc#405



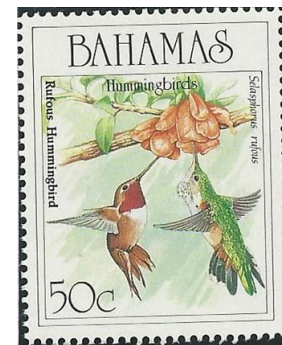
*Eulampis jugularis*  
1969, Sc#241



*Chlorostilbon swainsonii*  
1992, Sc#1645



*Eulampis jugularis*  
1976, Sc#467



*Selasphorus rufus*  
1989, Sc#671

I believe that I can say without fear of contradiction that the most remarkable bird in the avian kingdom is the diminutive Hummingbird.

They are the smallest of all birds, but are among the most delightful. Over 300 species inhabit the Western Hemisphere. They are tiny, jewel-like creatures bestowed with names like “Ruby” and “Topaz.”

They display an array of shimmering reds, blues, and lavenders, but surprisingly, their plumage contains just two pigments—black and brown. The appearance of color is caused by light reflected off the dense microscopic structure of their feathers. The hue and intensity of color varies with the level of light and the observer’s angle of view.

Like all birds, the hummer spends a lot of time taking care of its feathers, which are among its most precious assets. The hummingbird molts before it is a year old, then annually after that. Between 20 and 40 percent of its energy is expended in shedding and re-growing feathers.

The flight of the Broad-tailed Hummingbird (*Selasphorus platycercus*) is at once its most familiar and astonishing talent. It is able to hang suspended in mid-air, or zip in any direction with complete ease.

More than any other creature, the hummingbird is built for speed. Its wings beat 75 times per second, creating a buzz that gives the bird its name. Equally impressive is its remarkable endurance. Twice annually it migrate between northern ranges and wintering havens in the south. Remarkably, the 500 plus-mile trip across the Gulf of Mexico is made without a single stop.





*Anthracothorax viridis*  
1992, Sc#1650



*Archilochus colubris*  
1989, Sc#669



*Orthorhynchus cristatus*  
1979, Sc#501

The smallest of the species, the Cuban Bee Hummingbird (*Mellisuga helenae*) is the tiniest bird in the world, measuring just over two inches (5 cm) long and weighing under two grams (less than one-tenth of an ounce). By contrast, the largest member of the family, the Giant Hummingbird (*Patagona gigas*), is about 7½ inches (19 cm) long and weighs 20 grams (three-quarters of an ounce). Its heart can pump up to a staggering 1,260 beats per minute, more than 125 times faster than the heart of an average human being.

Although this tiny bird weighs a mere one-eighth of an ounce, it is fearless and irascible, and has been known to attack crows, hawks, and even eagles with its needle-like bill.

Flower nectar provides a source of quick energy for its whirlwind life, and the hummingbird is especially fond of brightly colored blooms. To fuel its full-burn lifestyle, a hummingbird devours half its body weight in food each day without gaining weight.

A hummingbird's nest is a fairy-like construction, a walnut-sized cradle spun from gossamer and cottony plant fibers. The little cups often are suspended by spider silk from cave ceilings, but usually fastened to a twig. A tiny lump of dirt is built ingeniously into the side of the nest to counterbalance the weight of the female as she incubates her pea-sized eggs.

Throughput the ages the diminutive hummingbird has been admired for its beauty. Going back a few hundred years, the people who inhabited the plains of Nazca in southern Peru were moved to "picture" a hummer on the desert floor by laying out stones in the form of the bird's body. That piece of art can still be viewed from the air and admired to this day.



*Anthracothorax dominicus*  
1992, Sc#1654



*Chlorostilbon ricordii*  
1989, Sc#668



*Cyanophaea bicolor*  
1994, Sc#1656



*Eulampis holosericeus*  
1979, Sc#504

## COMMON SPICES OF INDIA

Jayant Pai-Dhungat, India

[Ed. Note: This article appeared in the January/March 2016 issue of *Scalpel & Tongs* (Vol. 60, No. 1), the journal of the Medical Subjects study unit of the American Topical Association. It is reprinted here with permission. If you are interested in joining the Medical Subjects study unit, the dues are US \$15, elsewhere \$18. Contact Marion Rollings (drmarionrollings@yahoo.com).]

The exploration and crusades by European countries from the 15th century onwards were mainly to obtain spices since they were highly prized in Europe. Many spices have medicinal value and they have been the basis of many home remedies for years. Some common ones are described.

### Black Pepper (*Piper nigrum*)

Black pepper is one of the oldest and most important of all spices and is known as the “king of spices” (Fig. 1). It is a native of Western Ghats of India, but now is grown in many parts of world. Black pepper is the whole dry fruit, while white pepper is subjected to treatment in water with the *mesocarp* (middle layer of fruit) removed.

Both varieties are ground and used in powder form. Pepper is most widely used as a condiment as a table spice—its flavor and pungency blending well with most savory dishes. It is extensively used in pickles, ketchups, and sausages, and for seasoning food and as a preservative in curing meats.

Black pepper is a pungent and aromatic stimulant. Its pungency is due to resin *clavicine*. It has a pro-motility effect on digestive organs in dyspepsia. Pepper has been claimed to be beneficial in the treatment of the common cold. It also dilates superficial vessels and acts as a counter irritant in painful disorders.

### Cardamom (*Elettaria cardamomum*)

Cardamom is the “queen of spices,” second only to black pepper. Dried cardamom fruits of the plant constitute the main spice (Fig. 1). They have a pleasant aroma with a characteristic, slightly pungent taste.

Cardamom was mentioned by Theophrastus and Dioscorides. Cardamom is indigenous to South India growing in the rich moist soil at Mysore, Travancore, and Cochin. A volatile oil imparts the aroma and therapeutic properties of cardamom, the main constituents being *cineol* and *terpinol*.

It is used for flavoring curries, cakes, bread, and other culinary purposes. It gives a pleasing aroma to tea and coffee. Aromatic flavor in cardamom is a breath freshener. It has been considered effective in hiccups. The essential oil of cardamom is used for pharmaceutical purposes, perfumery, and flavoring liquors.

### Clove (*Syzygium aromaticum*)

Cloves are dried unopened flower buds from a mid-sized tree that have been used in India and China for over 2000 years (Fig. 1). It became known to Europe by the 8th century AD. The clove tree is a native of the Moluccas islands in Indonesia. Today Zanzibar is the leading producer of cloves.

Clove is used as a table spice and in the preparation of curry powder along with other spices. It is also used in the manufacture of perfumes and soap. Clove oil applied to the cavity of a decayed tooth relieves toothache—an age



Fig. 1. Clockwise from UL: Black Pepper, Cinnamon, Clove, & Cardamom. Center L-R: Turmeric, Chili, & Coriander  
India, 2009, Sc#2321f



old remedy. It promotes enzymatic flow and boosts digestive functioning. It eases expectoration and relieves irritation of the throat helping to ease coughing. It is also considered effective in asthma.

### Star Anise (*Illicium verum*)

Star Anise is obtained from the flowers of an evergreen tree of Vietnam and southwest China. Star anise is called *fulchakra* in India. It enhances the flavor of meat and fish, as shown in duck head curry on the Singapore stamp (Fig. 2).

It is used as a spice in preparation of *biryani* and *masala chai* all over the Indian subcontinent and widely used in Chinese cuisine. In India, Star anise is a major component of *garam masala*. It is widely grown for commercial use in China, India, and most other countries in Asia. Star anise is an ingredient of the five-spice powder of Chinese cooking.

Anise tea is a traditional remedy for rheumatism and has been used to relieve the symptoms of colds. Star anise is a major source of the chemical compound shikimic acid, a primary precursor in pharmaceutical synthesis of anti-influenza drug *oseltamivir* (Tamiflu). Also grown in Japan, Japanese star anise is a similar tree, but is highly toxic and inedible. Hence genuine star anise should be obtained from a reliable source.

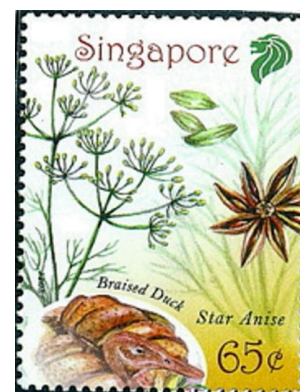


Fig. 2. Star Anise used with Braised Duck  
Singapore, 2011, Sc#1501

### Cinnamon (*Cinnamomum* sp.)



Fig. 3. Cinnamon in  
Masala Tea (spice tea)  
Singapore, 2011, Sc#1499



Fig. 4. Cinnamon  
B.I.O.T., 1968, Sc#10

Cinnamon leaves (dried) along with its dried, carefully selected inner bark that has been cured and dried, are used all over the world as a spice or condiment (Figs. 1, 3, 4). It is a native of Sri-Lanka, South India, and tropical Asia. It has a pleasing fragrance and a warm sweet aromatic taste.

Cinnamon was known to ancient physicians even before 2000 BC. Romans knew about the medicinal value of the bark. Galen and Dioscorides have described various uses of cinnamon.

The dried leaves of cinnamon are used for flavoring cakes, sweets, liquors, and in curry powder. Cinnamon acts as a mouth freshener, has been used to treat nausea and is an effective remedy for common colds. It also has a remarkable effect in countering the early release of ova after childbirth and has been used for natural birth control.

### Turmeric (*Curcuma longa*)

Turmeric has a short stem with raised or lifted branches. The rhizomes, or underground stems, are short and thick and constitute commercial turmeric (Figs. 1, 5). It is an important common flavoring spice of daily use in India and has been mentioned in Ayurveda since ancient times.

Turmeric is native to Southern and Southeastern Asia. The essential rhizome oil contains curcumin, ketone, and alcohol. It has a musky flavor, and imparts a yellow color to curries. It is also used as a coloring matter in the pharmaceutical and food industry.

Turmeric has many medical virtues. Juice given along with lime is a digestive and anti-flatulent. It has also been used for a long time as an antiseptic in acute skin abrasions and boils in India. When there was an attempt to patent the remedy by some recently, it led to an uproar in India. Turmeric is effective in the common cold, throat irritation, chronic cough, and treating sprains, and since it is rich in iron has been useful in anemia.



Fig. 5. Turmeric used in  
Fish Head Curry  
Singapore, 2011, Sc#1503

### Coriander (*Coriandrum sativum*)

Coriander is both an annual and perennial herb. Leaves are compound, thin, and easily breakable. Fruits are spherical having longitudinal ridges and are brownish yellow when ripe (Figs. 1, 6). It is a native of the Mediterranean region thriving in black soil and arid regions, but is now cultivated in many countries.

Coriander seeds are dried when they are ripe and are aromatic and spicy and an important ingredient of curry powder. It is also used in pickling spices, sausages, seasoning, confectionary, and flavoring spirits particularly gin. The leaves are used in chutneys, sauces, curries and soups.

They also have stimulant and tonic properties and coriander seeds have been used to reduce fever. Regular drinking of coriander water is believed to reduce cholesterol and is a good diuretic. It is also used as an eye wash in conjunctivitis.

### Tamarind (*Tamarindus indica*)

Tamarind is a large symmetrical spreading tree with small compound leaves, yellowish flowers with reddish streaks, and fleshy brown fruits (Fig. 1, 7, 8). It is a native of Africa, but is now grown in most tropical countries.

The pulp contains tartaric and other acids and carbohydrates including pectin. Ripe fruit and tamarind pulp is widely used in culinary preparations, notably *sambar*, *rasam* curries, and chutney in South India.

The whole plant has medicinal value. The pulp of ripe fruit is beneficial in bilious vomiting, and loss of appetite. The pulp is rich in vitamin C, making it valuable in preventing scurvy, and as it does not lose its anti-scorbutic property when dry, unlike other fruits and vegetables, it was an important item in the diet of sailors in the past. The leaves are cooling and anti-bilious, while the bark and seeds act as an astringent, a tonic that reduces fever.



Fig. 6. Coriander used in Satay Dish  
Singapore, 2011, Sc#1500



Fig. 7. Tamarind used in Assam Prawns Dish  
Singapore, 2011, Sc#1502



Fig. 8. Tamarind Plant  
Cameroun, 1981, Sc#700

# Flora & Fauna



**New issues 🐾 FDCs and Stamps**

**[www.fauna-stamps.com](http://www.fauna-stamps.com)**



**Philately Company s.r.o.**  
 Radouňova 2681/24, 155 00, Prague, Czech Republic  
 E-mail: [info@fauna-stamps.com](mailto:info@fauna-stamps.com) / Telefon: + (420) 773 133 955



## SNAKE PHOTOS

Dick Roman, our Publisher and new Herpetology Editor, is also an accomplished photographer. Here are two of his award-winning photos on the subject of his new column.



Mangrove Snake (*Boiga dendrophila*)



Red Spitting Cobra (*Naja pallida*)

The Photographic Society of America holds competitions between camera clubs called the Interclub Competition. The St. Louis Camera Club competes successfully in all sections.

These images were entered in the Nature Section and were judged in the top six in 2014.

These are captive animals raised for the pet trade. The images were taken with handlers on each side using four strobe lights and a constructed set, similar to where they live in nature.

---

## NATIONAL TOPICAL STAMP SHOW – 2017

The annual National Topical Stamp Show for 2017 sponsored by the American Topical Association is scheduled for Friday, 23 June through Sunday, 25 June at the Crowne Plaza Milwaukee Airport Hotel in Milwaukee, Wisconsin. Milwaukee is the birthplace of the ATA.

The NTSS is a World Series of Philately national exhibition and will feature a variety of thematic exhibits. This year there is a new category of Topical exhibits. Admission for all three days is \$5.00. There is free parking and free youth activities. The Biology Unit will hold its annual meeting at this show. Please plan to attend.

---

## HELP WANTED

Our Director, Fred Skvara, has volunteered to serve as the ATA Chapter Coordinator, a position that came open due to the illness of the previous coordinator. He previously served in this position some years ago.

The ATA is still looking for help with some other open positions.

**Topical Time Indexer:** Compile 2016 index by December 2016. The majority of the compilation can be completed now.

**Grants and Awards Coordinator:** Individual with experience writing grants to assist the ATA.

**DVD Updater:** Individual with DVD production skills to modify/update DVDs.



# BOTANY

Editor

Christopher E. Dahle, BU1269

## New Listings



Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
<b>BERMUDA</b> <b>2016 May 19</b> (Bermuda in World War I) (Set/6)				
1109-14		Poppies & various images, <i>Papaver rhoeas</i>	Papaveraceae	Fl B
<b>CROATIA</b> <b>2016 March 21</b> (Herb-scented) (Set/3 & 3ea Bklt/10)				
982	2.80k	Rosemary, <i>Rosmarinus officinalis</i>	Lamiaceae	V A
982a		Bklt/10 (Sc#982)		
983	3.10k	Lavender, <i>Lavandula angustifolia</i>	Lamiaceae	Fl A
983a		Bklt/10 (Sc#983)		
984	4.60k	Curry plant, <i>Helichrysum italicum</i>	Asteraceae	Fl A
984a		Bklt/10 (Sc#984)		
<b>2016 May 9</b> (Europa) (Set/2)				
993	4.60k	U/I leaf with water drop		U
<b>KYRGYZSTAN</b> <b>2016 February 13</b> (Flora of Kyrgyzstan) (Set/4 & SS/4)				
509	36s	<i>Tulipa kolpakowskiana</i>	Liliaceae	Fl A
510	39s	Porto Tulip, <i>Tulipa</i> 'Porto'	Liliaceae	Fl A
511	48s	Rio Bamba Orchid	Orchidaceae	Fl A
512	55s	<i>Cattleya</i> 'Queen Sirikhit Diamond Crown'	Orchidaceae	Fl A
512a		SS/4 (Sc#509-12)		Fl A SS
<b>LITHUANIA</b> <b>2016 April 2</b> (Tourism in Lithuania)				
1075	87c	Oak, <i>Quercus robur</i>	Fagaceae	T A
1075a		Bklt/4 (Sc#1075) (two tete-beche pairs)		T A
<b>MOLDOVA</b> <b>2016 March 1</b> (Martisor Spring Celebration) (Set/2)				
898	1.20L	Snowdrops, <i>Galanthus nivalis</i>	Amaryllidaceae	Fl A
899	5.75L	Cherry blossoms, <i>Prunus serrulata</i>	Rosaceae	Fl A
<b>NEPAL</b> <b>2015 October 2</b> (Flora) (Set/6)				
998	10r	East Himalayan Fir, <i>Abies spectabilis</i>	Pinaceae	Fr A
999	10r	<i>Gentiana robusta</i>	Gentianaceae	Fl A
1000	10r	Nepal Lily, <i>Lilium nepalense</i>	Liliaceae	Fl A
1001	10r	<i>Maharanga emodi</i>	Boraginaceae	Fl A
1002	10r	<i>Paris polyphylla</i>	Melanthiaceae	Fl A
1003	10r	Snowball plant, <i>Saussurea gossypiphora</i>	Asteraceae	Fl A
<b>NETHERLANDS</b> <b>2015 April 28</b> (Flora & Fauna of Naardermeer) (MS/10 & 5ea Bklt/2)				
1494a	(69c)	Black Alder, <i>Alnus glutinosa</i>	Betulaceae	V A MS
1494c	(69c)	Common Reed, <i>Phragmites australis</i>	Poaceae	Fl A MS
1494e	(69c)	Southern Marsh Orchid, <i>Dactylorhiza praetermissa</i> (=majalis ssp. praetermissa)	Orchidaceae	Fl A MS
1494g	(69c)	Water Lily, <i>Nymphaea alba</i>	Nymphaeaceae	Fl A MS
1494i	(69c)	Fringed Water Lily, <i>Nymphoides peltata</i>	Menyanthaceae	Fl A MS
1494		MS/10 (Sc#1494a-j) (perf 13¼×12¾)		



**NETHERLANDS** (continued)

1494k	(69c)	Black Alder, <i>Alnus glutinosa</i>	Betulaceae	V A MS
1494m	(69c)	Common Reed, <i>Phragmites australis</i>	Poaceae	Fl A MS
1494o	(69c)	<i>Dactylorhiza praetermissa</i> (= <i>majalis</i> ssp. <i>praetermissa</i> )	Orchidaceae	Fl A MS
1494q	(69c)	Water Lily, <i>Nymphaea alba</i>	Nymphaeaceae	Fl A MS
1494s	(69c)	Fringed Water Lily, <i>Nymphoides peltata</i>	Menyanthaceae	Fl A MS
1494u		Bklt/2 (Sc#1494s-t) (perf 14½×14¼)		
1494v		Bklt/2 (Sc#1494q-r) (perf 14½×14¼)		
1494w		Bklt/2 (Sc#1494o-p) (perf 14½×14¼)		
1494x		Bklt/2 (Sc#1494m-n) (perf 14½×14¼)		
1494y		Bklt/2 (Sc#1494k-l) (perf 14½×14¼)		

**NEVIS****2015 December 7** (Caribbean Blooms) (MS/6 & SS/1)

1887a	\$3.15	Royal Poinciana, <i>Delonix regia</i>	Fabaceae	Fl A MS
1887b	\$3.15	Hibiscus, <i>Hibiscus rosa-sinensis</i>	Malvaceae	Fl A MS
1887c	\$3.15	Bromeliad, <i>Neoregelia rosea</i>	Bromeliaceae	Fl A MS
1887d	\$3.15	Paper flower, <i>Bougainvillea spectabilis</i>	Nyctaginaceae	Fl A MS
1887e	\$3.15	Moth Orchid, <i>Phalaenopsis amabilis</i>	Orchidaceae	Fl A MS
1887f	\$3.15	Flamingo flower, <i>Anthurium andraeanum</i>	Araceae	Fl A MS
1888	SS \$10	Red Palulu, <i>Heliconia bihai</i>	Heliconiaceae	Fl A SS

**NEW ZEALAND****2015 July 1** (Popular New Zealand Foods) (MS/18)

2593a	80c	Asparagus rolls, <i>Asparagus officinalis</i>	Asparagaceae	V B MS
2593b	80c	Kiwi onion dip, <i>Allium cepa</i>	Amaryllidaceae	V B MS
2593p	80c	Pavlova; Strawberry, <i>Fragaria ananassa</i>	Rosaceae	Fr B MS
		Pavlova; Kiwi fruit, <i>Actinidia deliciosa</i>	Actinidiaceae	Fr B MS

**2016 June 22** (Personalized) (MS/10)

2654b	\$1	Fern fiddlehead, <i>Cyathea dealbata</i>	Cyatheaceae	V A MS
2654f	\$1	Pöhutukawa flowers, <i>Metrosideros excelsa</i>	Myrtaceae	Fl A MS
2654h	\$2.20	Fern fiddlehead, <i>Cyathea dealbata</i>	Cyatheaceae	V A MS
2654j	\$2.70	Pöhutukawa flowers, <i>Metrosideros excelsa</i>	Myrtaceae	Fl A MS

**NIGER****2013 September 30** (Honeybees & Flowers) (MS/4 & SS/1)

1282a	750fr	Quince, <i>Chaenomeles japonica</i>	Rosaceae	Fl B MS
1282b	750fr	Feverfew, <i>Tanacetum parthenium</i>	Asteraceae	Fl B MS
1282c	750fr	Majorcan Peony, <i>Paeonia cambessedesii</i>	Paeoniaceae	Fl B MS
1282d	750fr	Ross's Rhynchostele, <i>Rhynchostele</i> (= <i>Odontoglossum</i> ) <i>rossi</i>	Orchidaceae	Fl B MS
1307	SS 2500fr	Radish, <i>Raphanus sativus</i>	Brassicaceae	Fl B SS

**2013 December 20** (Orchids) (MS/4 & SS/1)

1337a	750fr	<i>Paphiopedilum callosum</i>	Orchidaceae	Fl A MS
1337b	750fr	<i>Cattleya dowiana</i> var. <i>aurea</i> (= <i>C. aurea</i> )	Orchidaceae	Fl A MS
1337c	750fr	<i>Cattleya labiata</i>	Orchidaceae	Fl A MS
1337d	750fr	<i>Miltonia spectabilis</i>	Orchidaceae	Fl A MS
1360	SS 2500fr	<i>Oncidium altissimum</i>	Orchidaceae	Fl A SS

**PALAU****2016 February 2** (Flowers & Plants of Palau) (MS/6 & SS/1)

1305a	65c	Screw Pine, <i>Pandanus amaryllifolius</i>	Pandanaceae	Fr A MS
1305b	65c	Coral tree flowers, <i>Erythrina variegata</i>	Fabaceae	Fl A MS
1305c	65c	Bayhops, <i>Ipomoea pes-caprae</i>	Convolvulaceae	Fl A MS
1305d	65c	Breadfruit, <i>Artocarpus altilis</i>	Moraceae	Fr A MS
1305e	65c	Coconut Palm, <i>Cocos nucifera</i>	Arecaceae	Fr A MS
1305f	65c	Beach Naupaka, <i>Scaevola taccada</i>	Goodeniaceae	V A MS
1306	SS \$4	Mangrove flowers, <i>Lumnitzera littorea</i>	Combretaceae	Fl A SS

**PALESTINIAN AUTHORITY**      **2013 June 3** (Flora & Fauna) (Set/6 & 2ea SS/1)

217	20f	White Iris, <i>Iris</i> sp.	Iridaceae	Fl A
219	480f	Anemones, <i>Anemone coronaria</i>	Ranunculaceae	Fl A
223	SS 1000f	Daisies, <i>Leucanthemum vulgare</i>	Asteraceae	Fl A SS

**2013** (Police Day) (Set/3 & SS/1)

226	200f	Policemen inspecting plants		V B U
227	250f	Police weeding or cultivating		V B U

**PHILIPPINES****2015** (Fruit Definitives) (Set/17)

3569	1p	Bananas, <i>Musa x paradisiaca</i>	Musaceae	Fr A
3570	1p	Black Plums, <i>Syzygium cumini</i>	Myrtaceae	Fr A
3571	3p	Mangos, <i>Mangifera indica</i>	Anacardiaceae	Fr A
3572	5p	Papayas, <i>Carica papaya</i>	Caricaceae	Fr A
3573	5p	Aratiles fruit, <i>Muntingia calabura</i>	Muntingiaceae	Fr A
3574	10p	Pineapples, <i>Ananas comosus</i>	Bromeliaceae	Fr A
3575	10p	Rose Apples, <i>Syzygium samarangense</i>	Myrtaceae	Fr A
3576	13p	Lanzones, <i>Lansium parasiticum</i> (=domesticum)	Meliaceae	Fr A
3577	20p	Santola, <i>Sandoricum koetjape</i>	Meliaceae	Fr A
3578	20p	Strawberries, <i>Fragaria ananassa</i>	Rosaceae	Fr A
3579	25p	Custard Apple, <i>Annona squamosa</i>	Annonaceae	Fr A
3580	30p	Soursops, <i>Annona muricata</i>	Annonaceae	Fr A
3581	30p	Ramboutan, <i>Nephelium lappaceum</i>	Sapindaceae	Fr A
3582	40p	Avocados, <i>Persea americana</i>	Lauraceae	Fr A
3583	40p	Jocotes, <i>Spondias purpurea</i>	Anacardiaceae	Fr A
3584	100p	Cashew fruit, <i>Anacardium orientale</i>	Anacardiaceae	Fr A
3585	100p	Johey Oaks, <i>Artocarpus odoratissimus</i>	Moraceae	Fr A

**2015 May 12** (Hibiscus Varieties) (Block/4 & MS/4 + 2 labels)

3607a	10p	Gloria, <i>Hibiscus rosa-sinensis</i> 'Gloria'	Malvaceae	Fl A
3607b	10p	Nay Isa, <i>Hibiscus rosa-sinensis</i> 'Nay Isa'	Malvaceae	Fl A
3607c	10p	Tadang Sora, <i>Hibiscus rosa-sinensis</i> 'Tadang Sora'	Malvaceae	Fl A
3607d	10p	Nazaria, <i>Hibiscus rosa-sinensis</i> 'Nazaria'	Malvaceae	Fl A
3608a	10p	Emerita V. de Guzman, <i>Hibiscus rosa-sinensis</i> 'Emerita V. de Guzman'	Malvaceae	Fl A
3608b	10p	Helen L. Valmayor, <i>Hibiscus rosa-sinensis</i> 'Helen L. Valmayor'	Malvaceae	Fl A
3608c	10p	Gelia T. Castillo, <i>Hibiscus rosa-sinensis</i> 'Gelia T. Castillo'	Malvaceae	Fl A
3608d	10p	Dolores A. Ramirez, <i>Hibiscus rosa-sinensis</i> 'Dolores A. Ramirez'	Malvaceae	Fl A

**2015 July 28** (Flower ptgs. by Pres. Corazon Aquino) (Block/4 & SS/1)

3617a	30p	"Harmony of Flowers"		Fl B U
3617b	30p	"Blue and Green Sea of Flowers"		Fl B U
3617c	30p	"Valley of Flowers"		Fl B U
3617d	30p	"Flowers by Forest Hills"		Fl B U
3618	SS 120p	"Pink Flowers in a Vase"		Fl B U SS

**POLAND****2015 December 7** (Fruit & Flowers Type of 2009)See *Plants on Stamps*, Vol. V, p. 166)

4205	5g	Lilacs, <i>Syringa vulgaris</i>	Oleaceae	Fl A
------	----	---------------------------------	----------	------

**2016 January 22** (50th anniv. Kidney Transplant)

4213	1.75z	Tree in shape of kidney		T A U
------	-------	-------------------------	--	-------

**PORTUGAL****2015 April 30** (Reintroduction of Lynx) (Set/4 & SS/1)

3697	55c	<i>Cistus ladanifer</i> (with lynx)	Cistaceae	Fl B
------	-----	-------------------------------------	-----------	------



**PORTUGAL** (continued)**2015 August 4** (150th anniv. Rules of Heredity) (Set/2)

3725	45c	Pea plant and Gregor Mendel, <i>Pisum sativum</i>	Fabaceae	V B
3726	€1	Pea plant and peas on chart, <i>Pisum sativum</i>	Fabaceae	Fr A

**2015 September 1** (Fruits & Nuts) (Set/6 & SS/6)

3730	45c	Chestnuts, <i>Castanea sativa</i>	Fagaceae	Fr A
3731	45c	Cherries, <i>Prunus avium</i>	Rosaceae	Fr A
3732	55c	Pears, <i>Pyrus communis</i>	Rosaceae	Fr A
3733	55c	Oranges, <i>Citrus sinensis</i>	Rutaceae	Fr A
3734	72c	Bananas, <i>Musa x paradisiaca</i>	Musaceae	Fr A
3735	80c	Pineapples, <i>Ananas comosus</i>	Bromeliaceae	Fr A
3735a		SS/6 (Sc#3730–35)		Fr A SS

**2015 October 14** (Intl. Year of Soils) (Vert pair)

3758a	45c	Earth, plant, roots, top of hourglass		V B
3758b	45c	Apple tree, apples, flowers, bottom of hourglass, <i>Malus domestica</i>	Rosaceae	Fr T B

**2015 October 23** (Gardens Type of 2014) [see Vol. 63(3), p. 159]

3759	E (72c)	Parque Terra Nostra, São Miguel, Azores		V B U
------	---------	-----------------------------------------	--	-------

**PORTUGAL (Azores)****2015 May 8** (Handicrafts) (Set/4 & SS/2)

571	45c	Ceramics: flowers, <i>Hydrangea macrophylla</i>	Hydrangeaceae	Fl A
575	€1.80	Plant fiber: corn husk doll, <i>Zea mays</i>	Poaceae	V B

**PORTUGAL (Madeira)****2015 April 16** (Flower Festival) (Set/4 & SS/2)

332	45c	Flower market		Fl B U
333	72c	Street decoration, <i>Gerbera x hybrida</i>	Asteraceae	Fl B
334	80c	Children carrying flowers		Fl B U
335	€1	Street garden		Fl B U
336	€1.80	Anthurium or Flamingo Flower, <i>Anthurium andraeanum</i>	Araceae	Fl A SS
337	€2	Hanging Lobster Claw, <i>Heliconia rostrata</i>	Heliconiaceae	Fl A SS

**ROMANIA****2015 February 20** (Flower Alphabet) (Set/6)

Each stamp in the set was issued in a MS/5 + label.

5658	3L	“T” Roses, Trandafir, <i>Rosa x hybrida</i>	Rosaceae	Fl A
5659	3.10L	“I” Iris, <i>Iris</i> sp.	Iridaceae	Fl A
5660	3.30L	“M” Poppy, Mac, <i>Papaver rhoeas</i>	Papaveraceae	Fl A
5661	4.30L	“B” Begonia, <i>Begonia x hybrida</i>	Begoniaceae	Fl A
5662	4.70L	“R” Flowering Tobacco, Regia Noptii, <i>Nicotiana</i> sp.	Solanaceae	Fl A
5663	14.50L	“E” Purple Coneflowers, Echinacea, <i>Echinacea purpurea</i>	Asteraceae	Fl A

**2015 July 3** (Flowers in Botanical Gardens) (Set/4 & Sheet/5 + label)

Each stamp in the set was issued in a MS/5 + label.

5690	1L	<i>Astragalus peterfii</i>	Fabaceae	Fl A
5691	3.30L	<i>Iris brandzae</i>	Iridaceae	Fl A
5692	8.10L	<i>Paeonia peregrina</i>	Paeoniaceae	Fl A
5693	9.10L	<i>Anemone (=Hepatica) transsilvanica</i>	Ranunculaceae	Fl A

**2015 August 7** (Medicinal Plants) (Set/4 & SS/4)

Each stamp in the set was issued in a MS/5 + label.

5699	1.20L	St. John's Wort, <i>Hypericum perforatum</i>	Hypericaceae	Fl A
5700	2L	Lavender, <i>Lavandula angustifolia</i>	Lamiaceae	Fl A
5701	2.40L	Calendula, <i>Calendula officinalis</i>	Asteraceae	Fl A
5702	14.50L	Chamomile, <i>Matricaria chamomilla</i>	Asteraceae	Fl A
5702b		SS/4 (Sc#5699–5702)		Fl A SS

**ROMANIA (continued)****2016 January 14** (Flowers Among the Thorns) (Set/4)

Each stamp in the set was issued in a MS/4.

5749	4.70L	<i>Dipsacus fullonum</i>	Caprifoliaceae	Fl A
5750	5L	<i>Centaurea solstitialis</i>	Asteraceae	Fl A
5751	6L	<i>Echinops ruthenicus</i>	Asteraceae	Fl A
5752	8.10L	<i>Ononis spinosa</i>	Fabaceae	Fl A

**ST. KITTS****2014 December 31** (Sunflowers) (2ea MS/4 & 2ea SS/1)

892a	\$3.25	<i>Helianthus annuus</i> (close-up of center)	Asteraceae	Fl A MS
892b	\$3.25	<i>H. annuus</i> (yellow flower against blue sky)	Asteraceae	Fl A MS
892c	\$3.25	<i>H. annuus</i> (pink-orange flower)	Asteraceae	Fl A MS
892d	\$3.25	<i>H. annuus</i> (flowers)	Asteraceae	Fl A MS
893a	\$3.25	<i>H. annuus</i> (close-up)	Asteraceae	Fl A MS
893b	\$3.25	<i>H. annuus</i> (image as part of bkgrd)	Asteraceae	Fl A MS
893c	\$3.25	<i>H. annuus</i> (flowers with dark centers)	Asteraceae	Fl A MS
893d	\$3.25	<i>H. annuus</i> (flowers with light centers)	Asteraceae	Fl A MS
894	SS \$10	<i>H. annuus</i> (flower bkgrd)	Asteraceae	Fl A SS
895	SS \$10	<i>H. annuus</i> (sky bkgrd)	Asteraceae	Fl A SS

**2015, April 1** (Palm Trees of the Caribbean) (MS/6 & SS/1)

912a	\$3.15	Coconut Palm, <i>Cocos nucifera</i> (pink denom)	Arecaceae	T A MS
942b	\$3.15	Petticoat Palm, <i>Copernicia macroglossa</i>	Arecaceae	T A MS
912c	\$3.15	Coconut Palm, <i>C. nucifera</i> (yellow denom)	Arecaceae	T A MS
912d	\$3.15	Royal Palm, <i>Roystonea regia</i> (blue denom)	Arecaceae	T A MS
912e	\$3.15	Royal Palm, <i>R. regia</i> (pink denom)	Arecaceae	T A MS
912f	\$3.15	Palmetto, <i>Sabal palmetto</i>	Arecaceae	T A MS
913	SS \$10	Coconut Palm, <i>C. nucifera</i>	Arecaceae	T A SS

**ST. MARTIN****2015 August 19** (Flowers) (Block/10)

70a	25c	Coral Vine, <i>Antigonon leptopus</i>	Polygonaceae	Fl A
70b	50c	Imperial Lily, <i>Fritillaria imperialis</i>	Liliaceae	Fl A
70c	75c	Bottlebrush, <i>Callistemon lanceolatus</i>	Myrtaceae	Fl A
70d	100c	Split-petal Hibiscus, <i>Hibiscus schizopetalus</i>	Malvaceae	Fl A
70e	200c	Canna, <i>Canna generalis</i>	Cannaceae	Fl A
70f	250c	Turk's Cap or Siberian Lily, <i>Lilium pumilum</i>	Liliaceae	Fl A
70g	350c	Caribbean Spider Lily, <i>Hymenocallis caribaea</i>	Amaryllidaceae	Fl A
70h	400c	Paper Narcissus, <i>Narcissus tazetta</i>	Amaryllidaceae	Fl A
70i	500c	Flame Vine or Golden Shower, <i>Pyrostegia venusta</i>	Bignoniaceae	Fl A
70j	600c	Castor Oil Bush, <i>Ricinus communis</i>	Euphorbiaceae	Fl A

**ST. PIERRE & MIQUELON****2015 February 6** (Painting by Claude L'Espagnol)

1009	76c	"Blueberry Fields," <i>Vaccinium</i> sp.	Ericaceae	V B
------	-----	------------------------------------------	-----------	-----

**2015 October 7** (Flora & Fauna)

1018	76c	Pond Lily, <i>Nuphar variegata</i> (with frog)	Nymphaeaceae	Fl B
------	-----	------------------------------------------------	--------------	------

**ST. THOMAS & PRINCE****2014 March 25** (Paintings by Cézanne) (MS/4)

2643a	25000d	"Still Life with Apples," <i>Malus domestica</i>	Rosaceae	Fr B MS
2643d	25000d	"Fruit and Jug on Table"		Fr B U MS

**2014 March 25** (Paintings by Dalí) (MS/4)

2647d	25000d	"Apparition of Face and Fruit Dish on a Beach"		Fr B U MS
-------	--------	------------------------------------------------	--	-----------

**2014 September 15** (Coastal Views) (MS/8)

2709	22000d	Coconut Palms, <i>Cocos nucifera</i>	Arecaceae	T B MS
------	--------	--------------------------------------	-----------	--------



**ST. THOMAS & PRINCE (cont) 2014 November 17 (Orchids) (MS/4 & SS/1)**

2811a	25000d	<i>Cattleya (=Laelia) tenebrosa</i>	Orchidaceae	Fl A MS
2811b	25000d	<i>Ophrys apifera</i>	Orchidaceae	Fl A MS
2811c	25000d	<i>Cattleya schilleriana</i>	Orchidaceae	Fl A MS
2811d	25000d	<i>Disa purpurascens</i>	Orchidaceae	Fl A MS
2828	SS 96000d	<i>Cattleya (=Laelia) xanthina</i>	Orchidaceae	Fl A SS

**ST. VINCENT 2015 August 3 (Carnivorous Plants) (MS/5 & SS/1)**

3996a	\$3.15	<i>Nepenthes sanguinea</i>	Nepenthaceae	V A MS
3996b	\$3.15	<i>Nepenthes x burkei</i>	Nepenthaceae	V A MS
3996c	\$3.15	<i>Nepenthes mirabilis</i>	Nepenthaceae	V A MS
3996d	\$3.15	<i>Nepenthes lowii</i>	Nepenthaceae	V A MS
3996e	\$3.15	<i>Nepenthes macfarlanei</i>	Nepenthaceae	V A MS
3997	SS \$10	<i>Drosera burmannii</i>	Droseraceae	V A SS

**SERBIA 2015 May 27 (Fruit) (Horiz strip/4 + label)**

701a	23d	Quince, <i>Cydonia oblonga</i>	Rosaceae	Fr A
701b	35d	Crab Apple, <i>Malus sylvestris</i>	Rosaceae	Fr A
701c	46d	Plums, <i>Prunus domestica</i>	Rosaceae	Fr A
701d	70d	Pears, <i>Pyrus communis</i>	Rosaceae	Fr A

**SINGAPORE 2015 August 7 (Singapore Botanic Garden) (Vert pair)**

1741	\$1.30	Gardens		V B U
------	--------	---------	--	-------

**SLOVENIA 2016 March 26 (Flowers) (Set/3 & SS/1)**

1163	60c	Spring Snowflake, <i>Leucojum vernum</i>	Amaryllidaceae	Fl A
1164	64c	Summer Snowflake, <i>Leucojum aestivum</i>	Amaryllidaceae	Fl A
1165	92c	Snowdrop, <i>Galanthus nivalis</i>	Amaryllidaceae	Fl A
1166	SS 97c	Wild Daffodil, <i>Narcissus radiiflorus</i>	Amaryllidaceae	Fl V SS Z

**SOLOMON ISLANDS 2015 May 24 (Singapore 2015 World Stamp Exhibition) (MS/4)**

1768b	\$5	Miss Joaquim Orchid, <i>Vanda</i> 'Miss Joaquim'	Orchidaceae	Fl A MS
1768c	\$5	Durian, <i>Durio singaporensis</i>	Malvaceae	Fr B MS
1768d	\$5	Gardens by the bay		Fl B U MS

**2015 September 3 (Orchids) (MS/4 & SS/1)**

1860a	\$12	<i>Bipinnula fimbriata</i>	Orchidaceae	Fl A MS
1860b	\$12	<i>Vanda concolor</i>	Orchidaceae	Fl A MS
1860c	\$12	<i>Vitekorhis excavata</i> (= <i>Oncidium excavatum</i> )	Orchidaceae	Fl A MS
1860d	\$12	<i>Chloraea bletoides</i>	Orchidaceae	Fl A MS
1880	SS \$40	<i>Rhynchostele cordata</i>	Orchidaceae	Fl A SS

**2015 November 30 (Orchids) (MS/4 & SS/1)**

1952a	\$12	<i>Dendrobium bigibbum</i>	Orchidaceae	Fl A MS
1952b	\$12	<i>Dendrobium loddigesii</i>	Orchidaceae	Fl A MS
1952c	\$12	<i>Dendrobium plicatile</i> (= <i>Flickingera fimbriata</i> )	Orchidaceae	Fl A MS
1952d	\$12	<i>Dendrobium bracteosum</i>	Orchidaceae	Fl A MS
1971	SS \$40	<i>Dendrobium fimbriatum</i>	Orchidaceae	Fl A SS
	Margin	UR: <i>Rhyncholaelia</i> (= <i>Brassavola</i> ) <i>digbyana</i>	Orchidaceae	Fl A SS Z
		LR: <i>Dendrobium parishii</i>	Orchidaceae	Fl A SS Z

**SOUTH AFRICA 2015 September 7 (World Forestry Congress, Durban) (MS/5)**

1548a	B4 (8r)	Wood carver		R
1548b	B4 (8r)	Cutting down tree		R
1548c	B4 (8r)	Measuring fern growth		R
1548d	B4 (8r)	Indigenous forest animals		R

**SOUTH AFRICA** (continued)

1548e	B4 (8r)	Forest flora and fungi: <i>Afrocarpus falcatus</i>	Podocarpaceae	Fl T MS
		<i>Plectranthus fruticosus</i>	Lamiaceae	Fl T MS
		<i>Streptocarpus candidus</i>	Gesneriaceae	Fl T MS

**S. GEORGIA & S. SANDWICH ISLANDS** 2015 December 21 (Biodiversity) (Set/6)

C5	(70p)	Greater burnet, <i>Sanguisorba officinalis</i>	Rosaceae	Fl A
----	-------	------------------------------------------------	----------	------

**SWEDEN**

2015 November 12 (Trees in Winter) (Horiz strip/5 &amp; Bklt/10)

2763a	(7k)	Birch, <i>Betula pendula</i>	Betulaceae	T A
2763b	(7k)	Evergreen tree	Pinaceae	T A
2763c	(7k)	European Ash, <i>Fraxinus excelsior</i>	Oleaceae	T A
2763d	(7k)	Evergreen tree	Pinaceae	T A
2763e	(7k)	U/I tree		T A
2763f		Bklt/10 (2ea Sc#2763a–e)		

2016 January 14 (Centenary Swedish Museum of Natural History)

2768c	(7k)	Fossil flower, <i>Silvianthemum suecicum</i>	Saxifragaceae	Fl A
		Dandelion pollen, <i>Taraxacum campylodes</i>	Asteraceae	Fl A
		Birch pollen, <i>Betula pubescens</i>	Betulaceae	Fl A
		Amaranth pollen, <i>Amaranthus</i> sp.	Amaranthaceae	Fl A
2768f		Bklt/10 (2ea Sc#2768a–e)		

2016 March 17 (International Foods) (Vert strip/5 &amp; Bklt/10)

2772a	(7k)	Olives, <i>Olea europaea</i> (Italian foods)	Oleaceae	Fr B
		Tomato, <i>Lycopersicon esculentum</i>	Solanaceae	Fr B
2772c	(7k)	Lime, <i>Citrus x latifolia</i> (Mexican foods)	Rutaceae	Fr V B
		Pepper, <i>Capsicum frutescens</i>	Solanaceae	Fr V B
		Avocado, <i>Persea americana</i>	Lauraceae	Fr V B
		Onion, <i>Allium cepa</i>	Amaryllidaceae	Fr V B
2772d	(7k)	Eggplants, <i>Solanum melongena</i> (Mediterranean foods)	Solanaceae	Fr B
2772e	(7k)	Tomato, <i>Lycopersicon esculentum</i> (American foods)	Solanaceae	Fr B
		Corn, <i>Zea mays</i>	Poaceae	Fr B
2772f		Bklt/10 (2ea Sc#2772a–e)		

**SYRIA**

2014 December 31 (Arbor Day)

1737	£245	Pistachio tree & nuts, <i>Pistacia vera</i>	Anacardiaceae	Fr T A
------	------	---------------------------------------------	---------------	--------

**TAJIKISTAN**

2015 April 18 (Flora &amp; Fauna) (MS/6)

439a	3s	Vanda Miss Joaquim, <i>Vanda</i> 'Miss Joaquim'	Orchidaceae	Fl A MS
439b	3s	Lotus, <i>Nelumbo nucifera</i>	Nelumbonaceae	Fl A MS

**THAILAND**

2015 February 9 (Chinese New Year)

2845a	5b	Oranges, <i>Citrus sinensis</i>	Rutaceae	Fr A
-------	----	---------------------------------	----------	------

2015 November 16 (Flowers &amp; Painting)

2884a	15b	Flowers in vase, <i>Exacum affine</i>	Gentianaceae	Fl A
2884b	15b	Painting by Princess Maha Chakri Sirindhorn, <i>Exacum affine</i>	Gentianaceae	Fl A

2015 November 23 (New Year 2016) (MS/12)

2885a	3b	<i>Boesenbergia alba</i>	Zingiberaceae	Fl A MS
2885b	3b	<i>Etlingera araneosa</i>	Zingiberaceae	Fl A MS
2885c	3b	Rathkihiriya, <i>Alpinia malaccensis</i>	Zingiberaceae	Fl A MS
2885d	3b	<i>Zingiber sirindhorniae</i>	Zingiberaceae	Fl A MS
2885e	3b	<i>Curcuma supraneena</i>	Zingiberaceae	Fl A MS
2885f	3b	<i>Hedychium flavescens</i>	Zingiberaceae	Fl A MS



**THAILAND** (continued)

2885g	3b	<i>Monolophus appendiculatus</i>	Zingiberaceae	Fl A MS
2885h	3b	Lesser Alpinia, <i>Alpinia conchigera</i>	Zingiberaceae	Fl A MS
2885i	3b	<i>Etlingera hemisphaerica</i>	Zingiberaceae	Fl A MS
2885j	3b	Siam Tulip, <i>Curcuma alismatifolia</i>	Zingiberaceae	Fl A MS
2885k	3b	Ginger, <i>Zingiber spectabile</i>	Zingiberaceae	Fl A MS
2885l	3b	<i>Rhynchanthus longiflorus</i>	Zingiberaceae	Fl A MS

**TOKELAU****2016 April 6** (Keyhole Gardening) (Sheet/5 & MS/5)

452a-e		Steps for making a keyhole garden		R
452f		MS/5 (Sc#452a-e) (with gardening instructions)		
	Margin	R: Tomato plant, <i>Lycopersicon esculentum</i>	Solanaceae	V B MS Z

**TRINIDAD & TOBAGO****2015** (Surcharges in black or red)

903	\$1	Cacao, <i>Theobroma cacao</i> (Sc#144 surch in blk)	Malvaceae	Fr A
905	\$2	Rachet, <i>Opuntia dillenii</i> (Sc#145 surch in blk)	Cactaceae	V A
906	\$3.25	Cat's Claws, <i>Dolichandra unguis-cati</i> (Sc#401h surch in red)	Bignoniaceae	Fl A
907	\$3.25	Cat's Claws, <i>Dolichandra unguis-cati</i> (Sc#401i surch in red)	Bignoniaceae	Fl A

**UNITED STATES****2016 June 2** (National Park Service centennial) (Pane/16 + label)

5080c	(47c)	"Scenery in the Grand Tetons" by Albert Bierstadt	Pinaceae	T A MS
5080j	(47c)	Water Lily, <i>Nelumbo nucifera</i> (Kenilworth Park)	Nelumbonaceae	Fl A MS
5080l	(47c)	Everglades National Park	Pinaceae	T A MS

**2016 June 7** (200th anniv. Indiana Statehood)

5091	(47c)	Cornfield, <i>Zea mays</i>	Poaceae	V A
------	-------	----------------------------	---------	-----

**2016 June 10** (Eid)

5092	(47c)	Olives, <i>Olea europaea</i>	Oleaceae	Fr B
------	-------	------------------------------	----------	------

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

**Write for the price list of your choice**

**EASTERN SHORE STAMP COMPANY**

**P.O. BOX 241, SEAFORD, DE 19963**

**e-mail: [essc@comcast.net](mailto:essc@comcast.net) Phone - Phone: (302) 629-2328**



<b>SPAIN</b>		<b>2015 July 28</b> (Mediterranean Diet) (Set/2)		
4063	€3.23	Line drawing of Mushrooms (printed with thermography)		S
<b>SOLOMON ISLANDS</b>		<b>2015 June 26</b> (Mushrooms) (MS/4 & SS/1)		
1820a	\$12	Sheathed Woodtuft, <i>Kuehneromyces mutabilis</i>	Strophariaceae	A
1820b	\$12	Pink Waxcap, <i>Porpolomopsis calyptriformis</i> (Cap/Syn: <i>Hygrocybe calyptriformis</i> )	Hygrophoraceae	A
1820c	\$12	Jack-o-lantern Mushroom, <i>Omphalotus olearius</i> (♀)	Marasmiaceae	A
1820d	\$12	Fly Agaric, <i>Amanita muscaria</i> (♀)	Amanitaceae	A
1840	SS \$40	Yellow Patches or Yellow Wart, <i>Amanita flavoconia</i>	Amanitaceae	A
	Margin	UR: Chanterelle or Girolle, <i>Cantharellus cibarius</i>	Cantharellaceae	Z
		UL: Yellow Swamp Russula, <i>Russula claroflava</i>	Russulaceae	Z
		LR: Fly Agaric, <i>Amanita muscaria</i> (♀)	Amanitaceae	Z
		<b>2015 September 25</b> (Australian Mushrooms) (MS/4 & SS/1)		
1894a	\$12	Orange Peel Fungus, <i>Aleuria rhenana</i>	Pyronemataceae	A
1894b	\$12	Delicate Tree Shell, <i>Anthrocephyllum archeri</i>	Marasmiaceae	A
1894c	\$12	No common name, <i>Austropaxillus infundibuliformis</i>	Serpulaceae	A
1894d	\$12	Butter Bolete, <i>Butyriboletus regius</i> (Cap/Syn: <i>Boletus regius</i> )	Boletaceae	A
1914	SS \$40	Pixie's Parasol, <i>Mycena interrupta</i>	Mycenaceae	A
	Margin	UR: Fly Agaric, <i>Amanita muscaria</i> (♀)	Amanitaceae	Z
		MR: Rounded Earthstar, <i>Geastrum saccatum</i>	Geastraceae	Z
		LR: Anemone Stinkhorn, <i>Aseroe rubra</i>	Phallaceae	Z
		<b>2016 May 3</b> (Mushrooms) (MS/4 & SS/1)		
1997a	\$7	Porcini or Cep, <i>Boletus edulis</i>	Boletaceae	A
1997b	\$7	Horn of Plenty or Black Trumpet, <i>Craterellus cornucopioides</i>	Cantharellaceae	A
1997c	\$7	Shiitake, <i>Lentinula edodes</i>	Marasmiaceae	A
1997d	\$7	Caesar's Mushroom, <i>Amanita caesarea</i>	Amanitaceae	A
2022	SS \$35	Chanterelle or Girolle, <i>Cantharellus cibarius</i>	Cantharellaceae	A
<b>SOUTH AFRICA</b>		<b>2015 September 7</b> (World Forestry Congress, Durban) (MS/5)		
1548e	(8r)	U/I Mushrooms among forest flora		B U
<b>SURINAME</b>		<b>2016 January 13</b> (Mushrooms) (SS/3)		
1492a	\$7	Wooly Milkcap or Bearded Milkcap, <i>Lactarius torminosus</i>	Russulaceae	A
1492b	\$9	Contrary Milkcap, <i>Cortinarius varius</i>	Cortinariaceae	A
1492c	\$12	No common name, <i>Cortinarius variecolor</i>	Cortinariaceae	A
<b>SWEDEN</b>		<b>2015 August 20</b> (Mushrooms) (Horiz pair & Horiz strip/5)		
2759	(7k)	Shaggy Inkcap, <i>Coprinus comatus</i>	Agaricaceae	A
2760	(7k)	Chanterelle or Girolle, <i>Cantharellus cibarius</i>	Cantharellaceae	A
2761a	(7k)	Weeping Milkcap, <i>Lactarius volemus</i>	Russulaceae	A
2761b	(7k)	Porcini or Cep, <i>Boletus edulis</i>	Boletaceae	A
2761c	(7k)	White Coral Fungus, <i>Ramaria flava</i>	Clavariaceae	A
2761d	(7k)	Scarlet Waxy Cap, <i>Hygrocybe punicea</i>	Hygrophoraceae	A
2761e	(7k)	Funnel Chanterelle, <i>Cantharellus tubaeformis</i>	Cantharellaceae	A
2761f		Bklt/10 (2ea Sc#2716a-e)		
		<b>2016 March 17</b> (International Foods) (Vert strip/5 & Bklt/10)		
2772a	(7k)	U/I Mushrooms (Italian foods)		C U
2772f		Bklt/10 (2ea Sc#2772a-e)		



**TAJIKISTAN****2014 October 3** (Mushrooms) (Set/3)

429	1.60s	Ruby Bolete, <i>Hortiboletus rubellus</i> (Cap/Syn: <i>Xerocomus r.</i> )	Boletaceae	A
430	2s	Chanterelle or Girole, <i>Cantharellus cibarius</i>	Cantharellaceae	A
431	2.50s	Grayling, <i>Cantharellula umbonata</i>	Hygrophoraceae	A

**TURKEY****2015 June 5** (Word Environment Day) (MS/4)

3442a	1.25L	Jew's Ear or Jelly Ear or Wood Ear, <i>Auricularia auricula-judae</i>	Auriculariaceae	A
3442b	1.25L	Magpie Fungus, <i>Coprinopsis picacea</i> (♀)	Psathyrellaceae	A
3442c	2.50L	White Morel, <i>Morchella deliciosa</i>	Morchellaceae	A
3442d	2.50L	Porcelain Fungus, <i>Oudemansiella mucida</i> (Cap/Syn: <i>Mucidula mucida</i> )	Physalacriaceae	A

**Look-alikes****PALAU****2014 December 1** (WWF: Jellyfish) (2ea Block or Horiz strip/4)

1256	@40c	Various jellyfish that mimic the shape of mushrooms	X
1257	@90c	Various jellyfish that mimic the shape of mushrooms	X

**ROMANIA****2015 October 9** (Peles Castle Stained Glass Windows) (Set/4)

5720	2L	U/I Mushrooms or look-alikes in scene depicting boar hunting	U B
5720a		MS/4 (Sc#5720 + 2 labels)	
5722	2L	U/I Mushrooms or look-alikes in scene depicting hare hunting	U B
5722a		MS/4 (Sc#5722 + 2 labels)	

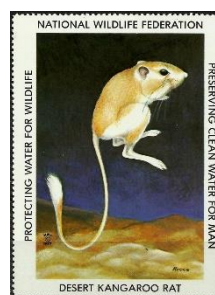
**BIOLOGICAL TRIVIA**

These are tough. See how many you can answer correctly. Answers are on page 166.

- What is the grammatically correct plural of octopus?
  - octopuses
  - octopodes
  - octopi
  - octopus
- Why do beavers have transparent eyelids?
  - to focus on close objects
  - to protect their eyes from wood chips
  - to see while swimming underwater
  - to enhance their night vision
- Jellyfish have a body plan that biologists describe as:
  - annelid
  - coelenterate
  - tubular
  - transparent
- Lobsters, crabs, and shrimp all belong to what group of animals?
  - Chordata
  - Mollusca
  - Ichthyata
  - Arthropoda
- Why do fish swim in schools?
  - to improve breeding chances
  - to chase away larger fish
  - to confuse predators
  - to surround prey



6. Which one of the following animals has no gut?
- sea cucumber
  - salamander
  - earthworm
  - tapeworm
7. What is the hormone in plants that causes them to bend towards the light?
- auxin
  - photosynthesis
  - chlorophyll
  - starch
8. How long can the kangaroo rat go without drinking water?
- one day
  - seven days
  - one month
  - its entire life
9. What living animal has the heaviest brain?
- African elephant
  - black rhinoceros
  - sperm whale
  - human
10. What type of plant is a banana?
- herb
  - tree
  - flower
  - grass



## MARINE MAMMALS

On 25 May 2016, Antigua and Barbuda issued a MS/4 and SS/1 depicting Marine Mammals. This would not be out of the ordinary for an island nation surrounded by various marine species, except that these stamps show animals that live about 3,000 miles (4,800 km) away from the islands.

The SS shows a herd of walrus (*Odobenus rosmarus*), that live in the Arctic Ocean and subarctic seas.

The MS show three species of seals and a Polar Bear (*Ursus maritimus*). This bear is the largest member of the Ursidae family with adult males weighing as much as 1,500 pounds. Its range also encompasses the Arctic region. I imagine it would find the climate in Antigua quite uncomfortable.

The seals shown on the stamps are the California Sea Lion (*Zalophus californianus*) found in the coastal areas of western North America, the Northern Fur Seal (*Callorhinus ursinus*) found in the northern Pacific Ocean and Bering Sea, and a juvenile Harp Seal (*Pagophilus groenlandicus*) another native of the Arctic Ocean.

The cute and cuddly harp seal is one of the primary prey of polar bears. When someone mentions to me how climate change is adversely affecting polar bears, I often reply that is a good thing because the polar bears eat baby seals.





# MAMMALIA

Editor

Michael Prince, LM68



## New Listings

Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
<b>BOLIVIA</b> <b>2016 May 16</b> (Endangered Animals) (Set/4)				
1614	15b	Andean Hairy Armadillo, <i>Chaetophractus nationi</i>	Dasypodidae	(new) A
<b>NAMIBIA</b> <b>2015 June 22</b> (Antelopes) (Set/4)				
1307	(\$6.40)	Steenbok, <i>Raphicerus campestris</i>	Bovidae	A
1308	(\$6.40)	Bush Duiker, <i>Sylvicapra grimmia</i>	Bovidae	A
1309	(\$6.40)	Klipspringer, <i>Oreotragus oreotragus</i>	Bovidae	A
1310	(\$6.40)	Kirk's Dik-dik, <i>Madoqua kirkii</i>	Bovidae	A
<b>2015 July 6</b> (Juvenile Big Game Animals) (Set/5)				
1311	(\$3.50)	Leopard, <i>Panthera pardus</i>	Felidae	A
1312	\$5.70	African Bush Elephant, <i>Loxodonta africana</i>	Elephantidae	A
1313	\$6.60	Black Rhinoceros, <i>Diceros bicornis</i>	Rhinocerotidae	A
1314	\$7.70	African Buffalo, <i>Syncerus caffer</i>	Bovidae	A
1315	(\$35.50)	Lion, <i>Panthera leo</i>	Felidae	A
<b>NEPAL</b> <b>2015 October 2</b> (Wildlife Reserves & National Parks) (Set/5)				
993	1r	Wild Water Buffalo, <i>Bubalus arnee</i>	Bovidae	A
<b>NEVIS</b> <b>2014 December 16</b> (Whales & Dolphins) (MS/6, MS/4, & 2ea SS/1)				
1853a	\$3.15	Killer Whale, <i>Orcinus orca</i> (leaping down left)	Delphinidae	A
1853b	\$3.15	Same species (leaping up left)		A
1853c	\$3.15	Same species (leaping right)		A
1853d	\$3.15	Same species (mouth open)		A
1853e	\$3.15	Same species (diving)		A
1853f	\$3.15	Same species (upright out of water) (also on Top margin)		A
1854a	\$3.25	Humpback Whale, <i>Megaptera novaeangliae</i> (underwater)	Balaenopteridae	A
1854b	\$3.25	Same species (leaping right) (also on Bot margin)		A
1854c	\$3.25	Same species (breaching)		A
1854d	\$3.25	Same species (leaping left)		A
1855	SS \$10	Pygmy Killer Whale, <i>Feresa attenuata</i> (also in R margin)	Delphinidae	A
1856	SS \$10	Sperm Whale, <i>Physeter catodon</i> (also in L margin)	Physeteridae	A
<b>NIGER</b> <b>2013 September 30</b> (Various Wildlife) (MS/4 & SS/1)				
1278a	675fr	Dama Gazelle, <i>Nanger dama</i> (head & bkgrd)	Bovidae	A
1278b	675fr	Same species (leaping right)		A
1278c	675fr	Same species (laying down)		A
1278d	675fr	Same species (adult & juvenile)		A
1302	SS 2000fr	Dama Gazelle, <i>Nanger dama</i> (national symbol of Niger)	Bovidae	A
	Margin	Bot: Same species		Z
1279a	675fr	Burchell's Zebra, <i>Equus quagga</i>	Equidae	A
1279b	675fr	Common Warthog, <i>Phacochoerus africanus</i>	Suidae	A
1279c	675fr	Hippopotamus, <i>Hippopotamus amphibius</i>	Hippopotamidae	A
1279d	675fr	Red Hartebeest, <i>Alcelaphus caama</i>	Bovidae	(new) A
1303	SS 2000fr	White Rhinoceros, <i>Ceratotherium simum</i>	Rhinocerotidae	A
	Margin	R & LR: Giraffe, <i>Giraffa camelopardalis</i>	Giraffidae	Z



**NIGER** (continued)

1280a	675fr	Caracal, <i>Caracal caracal</i>	Felidae	A
1280b	675fr	Serval, <i>Leptailurus serval</i>	Felidae	A
1280c	675fr	Cheetah, <i>Acinonyx jubatus</i>	Felidae	A
1280d	675fr	Leopard, <i>Panthera pardus</i>	Felidae	A
1304	SS 2000fr	Lion, <i>Panthera leo</i>	Felidae	A
	Margin	Bot: Caracal, <i>Caracal caracal</i>	Felidae	Z
1281a	750fr	Humpback Whale, <i>Megaptera novaeangliae</i>	Balaenopteridae	A
1281b	750fr	Sei Whale, <i>Balaenoptera borealis</i>	Balaenopteridae	A
1281c	750fr	Blue Whale, <i>Balaenoptera musculus</i>	Balaenopteridae	A
1281d	750fr	Grey Whale, <i>Eschrichtius robustus</i>	Eschrichtiidae	A
1306	SS 2000fr	Killer Whale, <i>Orcinus orca</i>	Delphinidae	A
	Margin	Bot: Sperm Whale, <i>Physeter macrocephalus</i>	Physeteridae	Z

**2013 December 20** (Various Wildlife) (MS/4 & SS/1)

1329a	750fr	Chimpanzee, <i>Pan troglodytes</i> (sitting)	Hominidae	A
1329b	750fr	Same species (reclining)		A
1329c	750fr	Same species (with infant)		A
1329d	750fr	Same species (squatting looking left)		A
	Margin	Top: Same species		Z
1352	SS 2500fr	Chimpanzee, <i>Pan troglodytes</i>	Hominidae	A
	Margin	Top: Same species		Z
1330a	750fr	Dugong, <i>Dugong dugon</i> (facing left)	Dugongidae	A
1330b	750fr	Same species (facing front)		A
1330c	750fr	Same species (foraging)		A
1330d	750fr	Same species (with fish)		A
	Margin	Top: Same species		Z
1353	SS 2500fr	Dugong, <i>Dugong dugon</i>	Dugongidae	A
	Margin	Top: Same species		Z
1331a	750fr	Common Bottlenose Dolphin, <i>Tursiops truncatus</i> (leap right)	Delphinidae	A
1331b	750fr	Same species (pair leaping left)		A
1331c	750fr	Same species (pair leaping right)		A
1331d	750fr	Common Short-beaked Dolphin, <i>Delphinus delphis</i>	Delphinidae	A
1354	SS 2500fr	Common Bottlenose Dolphin, <i>Tursiops truncatus</i>	Delphinidae	A
	Margin	Top: Same species (pair leaping right)		Z
1335b	750fr	Giant Panda, <i>Ailuropoda melanoleuca</i>	Ursidae	A
1335c	750fr	African Forest Elephant, <i>Loxodonta cyclotis</i>	Elephantidae	A
1335d	750fr	Leopard <i>Panthera pardus</i>	Felidae	A
1358	SS 2500fr	Black Rhinoceros, <i>Diceros bicornis</i>	Rhinocerotidae	A
	Margin	Top: Golden Lion Tamarin, <i>Leontopithecus rosalia</i>	Callitrichidae	Z
1336a	750fr	Antarctic Fur Seal, <i>Arctocephalus gazella</i>	Otariidae	A
1336b	750fr	Polar Bear, <i>Ursus maritimus</i>	Ursidae	A
1336c	750fr	Giraffe, <i>Giraffa camelopardalis</i>	Giraffidae	A
1336d	750fr	Walrus, <i>Odobenus rosmarus</i>	Odobenidae	A
1358	Margin	Top: Polar Bear, <i>Ursus maritimus</i>	Ursidae	Z

**NORWAY****2015 March 4** (Wildlife Type of 2006) (Single)

1763	14k	Brown Bear, <i>Ursus arctos</i>	Ursidae	A
------	-----	---------------------------------	---------	---

**PALESTINIAN AUTHORITY****2013 June 3** (Flora & Fauna) (Set/6)

218	100fi	Caracal, <i>Caracal caracal</i>	Felidae	A
222	1080fi	Nubian Ibex, <i>Capra nubiana</i>	Bovidae	A

<b>PARAGUAY</b>		<b>2015 June 12</b> (Animals) (Block/3 + label)		
3024a	1000g	Azara's Night Monkey, <i>Aotus azarai</i>	Cebidae	(new) A
3024b	1400g	Geoffroy's Cat, <i>Oncifelis geoffroyi</i>	Felidae	A
3024c	3000g	Capybara, <i>Hydrochoerus hydrochaeris</i>	Caviidae	A
<b>PHILIPPINES</b>		<b>2015 June 3</b> (60th anniv. Relations with Finland) (Horiz pair)		
3611a	10p	Brown Bear, <i>Ursus arctos</i>	Ursidae	A
3611b	40p	Tamaraw, <i>Bubalus mindorensis</i>	Bovidae	A
		<b>2015 November 11</b> (Wildlife) (MS/4)		
3634c	15p	Philippine Pangolin, <i>Manis culionensis</i>	Manidae	(new) A
<b>PORTUGAL</b>		<b>2015 April 30</b> (Reintroduction of the Iberian Lynx) (Set/4 & SS/1)		
3696	45c	Iberian Lynx, <i>Lynx pardinus</i>	Felidae	A
3697	55c	Same species		A
3698	72c	Same species		A
3699	80c	Same species		A
3700	SS €2	Iberian Lynx, <i>Lynx pardinus</i>	Felidae	A
<b>ROMANIA</b>		<b>2014 October 10</b> (Wild Cats) (Set/4) (each issued in Sheet/5 + label)		
5609	3.30L	Wild Cat, <i>Felis silvestris</i> ssp. <i>ocreata</i>	Felidae	A
5610	3.60L	Wild Cat, <i>Felis silvestris</i> ssp. <i>ornata</i>	Felidae	A
5611	7.60L	Wild Cat, <i>Felis silvestris</i>	Felidae	A
5612	8.10L	Wild Cat, <i>Felis silvestris</i> ssp. <i>cafra</i>	Felidae	A
<b>ROMANIA</b>		<b>2015 January 16</b> (Wildlife) (Set/4 & SS/4)		
5642	3.60L	Springbok, <i>Antidorcas marsupialis</i>	Bovidae	A
5643	4.30L	Puma, <i>Puma concolor</i>	Felidae	A
5644	8.10L	Killer Whale, <i>Orcinus orca</i>	Delphinidae	A
5645	9.10L	Cheetah, <i>Acinonyx jubatus</i>	Felidae	A
<b>ST MARTIN</b>		<b>2015 November 18</b> (Primates) (Block/6)		
74a	75c	White-faced Capuchin, <i>Cebus capucinus</i>	Cebidae	A
74b	125c	Geoffroy's Spider Monkey, <i>Ateles geoffroyi</i>	Atelidae	A
74c	275c	Dusky Leaf Monkey, <i>Trachypithecus obscurus</i>	Cercopithecidae	(new) A
74d	325c	Red-faced Spider Monkey, <i>Ateles paniscus</i>	Atelidae	A
74e	475c	Brown Capuchin, <i>Cebus apella</i>	Cebidae	A
74f	525c	Collared Titi, <i>Callicebus torquatus</i>	Pitheciidae	A
<b>ST THOMAS &amp; PRINCE ISLANDS</b>		<b>2014 March 25</b> (50th anniv. of Red List) (MS/4 & SS/1)		
2648c	25000d	Golden Lion Tamarin, <i>Leontopithecus rosalia</i>	Callitrichidae	A
2648d	25000d	Snow Leopard, <i>Uncia uncia</i>	Felidae	A
2668	SS 96000d	Sangihe Tarsier, <i>Tarsius sangirensis</i>	Tarsiidae	(new) A
		<b>2014 August 8</b> (Pandas) (MS/4 & SS1)		
2673a	25000d	Giant Panda, <i>Ailuropoda melanoleuca</i> (resting chin on pole)	Ursidae	A
2673b	25000d	Same species (hanging below branch)		A
2673c	25000d	Same species (two at branch base)		A
2673d	25000d	Giant Panda, <i>Ailuropoda melanoleuca</i> ssp. <i>qinlingensis</i>	Ursidae	A
	Margin	UL: Giant Panda, <i>Ailuropoda melanoleuca</i>	Ursidae	Z
2691	SS 96000d	Giant Panda, <i>Ailuropoda melanoleuca</i>	Ursidae	A
	Margin	LR: Same species (adult & juvenile)		Z
		Top: Red Panda, <i>Ailurus fulgens</i>	Ailuridae	Z

**ST THOMAS & PRINCE IS. (cont) 2014 August 8 (Dolphins) (MS/4 & SS1)**

2674a	25000d	Hector's Dolphin, <i>Cephalorhynchus hectori</i>	Delphinidae	A
2674b	25000d	Amazon River Dolphin, <i>Inia geoffrensis</i>	Iniidae	A
2674c	25000d	Short-beaked Common Dolphin, <i>Delphinus delphis</i>	Delphinidae	A
2674d	25000d	Ganges River Dolphin, <i>Platanista gangetica</i>	Platanistidae	A
	Margin	UR: Long-beaked Common Dolphin, <i>Delphinus capensis</i>	Delphinidae	Z
2692	SS 96000d	Common Bottlenose Dolphin, <i>Tursiops truncatus</i> (also LR)	Delphinidae	A
	Margin	Top: Hourglass Dolphin, <i>Lagenorhynchus cruciger</i>	Delphinidae	Z

**2014 September 15 (Various Wildlife) (MS/4 & SS/1)**

2711a	25000d	Koala, <i>Phascolarctos cinereus</i> (juvenile on adult's back)	Phascolarctidae	A
2711b	25000d	Same species (sitting in tree)		A
2711c	25000d	Same species (holding juvenile)		A
2711d	25000d	Same species (climbing tree)		A
	Margin	Top: Same species (eating leaves)		Z
2731	SS 96000d	Koala, <i>Phascolarctos cinereus</i>	Phascolarctidae	A
	Margin	R: Same species (adult & juvenile sitting in tree)		Z
2712a	25000d	Grey Wolf, <i>Canis lupus</i> (howling)	Canidae	A
2712b	25000d	Same species (in snow)		A
2712c	25000d	Same species (pair)		A
2712d	25000d	Same species (on rock)		A
	Margin	Top: Same species (pack)		Z
2732	SS 96000d	Grey Wolf, <i>Canis lupus</i>	Canidae	A
	Margin	R: Same species (pair)		Z
2713a	25000d	Snow Leopard, <i>Uncia uncia</i> (walking on ice-mouth closed)	Felidae	A
2713b	25000d	Same species (sitting near rocks)		A
2713c	25000d	Same species (head)		A
2713d	25000d	Same species (walking on snow-mouth open)		A
	Margin	Top: Same species (reclining)		Z
2733	SS 96000d	Snow Leopard, <i>Uncia uncia</i>	Felidae	A
	Margin	R: Same species (standing on rock)		Z
2715a	25000d	Killer Whale, <i>Orcinus orca</i> (pair leaping right)	Delphinidae	A
2715b	25000d	Same species (open mouth facing right)		A
2715c	25000d	Same species (pair leaping left)		A
2715d	25000d	Same species (open mouth facing left)		A
	Margin	Top: Same species (pair)		Z
2735	SS 96000d	Killer Whale, <i>Orcinus orca</i>	Delphinidae	A
	Margin	R: Same species (leaping left)		Z
2725b	25000d	Leopard, <i>Panthera pardus</i>	Felidae	A
2725c	25000d	Brown Bear, <i>Ursus arctos</i>	Ursidae	A
2725d	25000d	Grey Wolf, <i>Canis lupus</i>	Canidae	A
	Margin	Top: Tiger, <i>Panthera tigris</i>	Felidae	Z
2745	SS 96000d	Brown Bear, <i>Ursus arctos</i>	Ursidae	A
	Margin	R: Lion, <i>Panthera leo</i>	Felidae	Z

**2014 October 15 (Various Wildlife) (MS/4 & SS/1)**

2757a	25000d	Mona Monkey, <i>Cercopithecus mona</i>	Cercopithecidae	A
2757b	25000d	Humboldt's Woolly Monkey, <i>Lagothrix lagotricha</i>	Cebidae	A
2757c	25000d	Zanzibar Red Colobus, <i>Piliocolobus kirkii</i>	Cercopithecidae	A
2757d	25000d	Gelada Baboon, <i>Theropithecus gelada</i>	Cercopithecidae	A
2777	SS 96000d	Golden Snub-nosed Monkey, <i>Rhinopithecus roxellana</i>	Cercopithecidae	A
	Margin	UR: Gelada, <i>Theropithecus gelada</i>	Cercopithecidae	Z
		Bot: Mandrill, <i>Mandrillus sphinx</i>	Cercopithecidae	Z



**ST THOMAS & PRINCE ISLANDS** (continued)

2758a	25000d	Lion, <i>Panthera leo</i> (male with open mouth)	Felidae	A
2758b	25000d	Same species (male & female)		A
2758c	25000d	Same species (male with closed mouth)		A
2758d	25000d	Same species (female & cub)		A
2778	SS 96000d	Lion, <i>Panthera leo</i>	Felidae	A
	Margin	R: Same species (female & cub)		Z
2761a	25000d	Bryde's Whale, <i>Balaenoptera edeni</i>	Balaenopteridae	A
2761b	25000d	Grey Whale, <i>Eschrichtius robustus</i>	Eschrichtiidae	A
2761c	25000d	Sperm Whale, <i>Physeter catodon</i>	Physeteridae	A
2761d	25000d	Blue Whale, <i>Balaenoptera musculus</i>	Balaenopteridae	A
2781	SS 96000d	Humpback Whale, <i>Megaptera novaeangliae</i>	Balaenopteridae	A
	Margin	R: North Atlantic Right Whale, <i>Eubalaena glacialis</i>	Balaenidae	Z

**2014 November 17** (Dolphins) (MS/4 & SS/1)

2806a	25000d	Atlantic Spotted Dolphin, <i>Stenella frontalis</i>	Delphinidae	A
2806b	25000d	Dusky Dolphin, <i>Lagenorhynchus obscurus</i>	Delphinidae	A
2806c	25000d	Rough-toothed Dolphin, <i>Steno bredanensis</i>	Delphinidae	A
2806d	25000d	Heaviside's Dolphin, <i>Cephalorhynchus heavisidii</i>	Delphinidae	A
2823	SS 96000d	Common Bottlenose Dolphin, <i>Tursiops truncatus</i>	Delphinidae	A
	Margin	R: Same species		Z

**ST VINCENT****2015 March 2** (Taipei 2015 International Stamp Exhibition)

3986a	\$3.25	Sambar Deer, <i>Rusa unicolor</i>	Cervidae	A
3986b	\$3.25	Asiatic Black Bear, <i>Ursus thibetanus</i>	Ursidae	A
3986c	\$3.25	European Otter, <i>Lutra lutra</i>	Mustelidae	A
3986d	\$3.25	Reeves's Muntjac, <i>Muntiacus reevesi</i>	Cervidae	(new) A
	Margin	L: Sambar Deer, <i>Rusa unicolor</i>	Cervidae	Z
3988	SS \$10	Taiwan Macaque, <i>Macaca cyclopis</i>	Cercopithecidae	A
	Margin	L: Same species		Z

**2015 December 31** (Wild Dogs) (2ea MS/3 & 2ea SS/1)

4015a	\$3.50	Wild Dog, <i>Lycaon pictus</i> (head looking left)	Canidae	A
4015b	\$3.50	Same species (head facing front)		A
4015c	\$3.50	Same species (head looking right)		A
	Margin	R: Same species (standing)		Z
4016a	\$3.50	Wild Dog, <i>Lycaon pictus</i> (three dogs)	Canidae	A
4016b	\$3.50	Same species (head facing front)		A
4016c	\$3.50	Same species (walking)		A
	Margin	R: Same species (sitting)		Z
4017	SS \$10	Wild Dog, <i>Lycaon pictus</i> (walking) (also in R margin)	Canidae	A
4018	SS \$10	Wild Dog, <i>Lycaon pictus</i> (sitting) (also in R margin)	Canidae	A

**SINGAPORE****2015 August 7** (Singapore Botanic Garden UNESCO) (Vert pair)

1741b	\$1.30	Smooth-coated Otter, <i>Lutrogale perspicillata</i>	Mustelidae	B
-------	--------	-----------------------------------------------------	------------	---

**SLOVAKIA****2015 October 9** (Nature Protection) (SS/2 + 5 labels)

723a	65c	European Otter, <i>Lutra lutra</i> (also on label)	Mustelidae	A
------	-----	----------------------------------------------------	------------	---

**SOLOMON ISLANDS****2015 May 24** (Protected Species in Taiwan) (MS/4 & SS/1)

1766b	\$5	Taiwan Macaque, <i>Macaca cyclopis</i>	Cercopithecidae	A
1766c	\$5	Leopard Cat, <i>Prionailurus bengalensis</i>	Felidae	A
1767	\$20	Sambar Deer, <i>Rusa unicolor</i> (also in Bot margin)	Cervidae	A

**SOLOMON ISLANDS (continued) 2015 June 26 (Various Wildlife) (MS/4 & SS/1)**

1806a	\$12	Giant Panda, <i>Ailuropoda melanoleuca</i> (walking right)	Ursidae	A
1806b	\$12	Same species (in grass)		A
1806c	\$12	Same species (on tree branch)		A
1806d	\$12	Same species (with bamboo)		A
1826	SS \$40	Giant Panda, <i>Ailuropoda melanoleuca</i>	Ursidae	A
	Margin	Bot: Same species		Z
1807a	\$12	Straw-colored Fruit Bat, <i>Eidolon helvum</i>	Pteropodidae	A
1807b	\$12	Australian False Vampire Bat, <i>Macroderma gigas</i>	Megadermatidae	A
1807c	\$12	Egyptian Rousette, <i>Rousettus aegyptiacus</i>	Pteropodidae	A
1807d	\$12	Jamaican Fruit-eating Bat, <i>Artibeus jamaicensis</i>	Phyllostomidae	A
1827	SS \$40	L: Large Flying Fox, <i>Pteropus vampyrus</i>	Pteropodidae	B
		R: Grey-headed Flying Fox, <i>Pteropus poliocephalus</i>	Pteropodidae	B
	Margin	Bot: Grey-headed Flying Fox, <i>Pteropus poliocephalus</i>	Pteropodidae	Z

**2016 May 13 (Various Wildlife) (MS/4 & SS/1)**

1975a	\$7	Koala, <i>Phascolarctos cinereus</i> (sleeping in tree)	Phascolarctidae	A
1975b	\$7	Same species (on branch)		A
1975c	\$7	Same species (pair sleeping)		A
1975d	\$7	Same species (head only)		A
2000	SS \$35	Koala, <i>Phascolarctos cinereus</i>	Phascolarctidae	A
	Margin	Top: Same species (adult & infant)		Z
1976a	\$7	Tasmanian Devil, <i>Sarcophilus harrisii</i> (facing right mouth open)	Dasyuridae	A
1976b	\$7	Same species (facing front)		A
1976c	\$7	Same species (facing right)		A
1976d	\$7	Same species (facing left)		A
2001	SS \$35	Tasmanian Devil, <i>Sarcophilus harrisii</i>	Dasyuridae	A
	Margin	Top: Same species		Z
1977a	\$7	Coarse-haired Wombat, <i>Vombatus ursinus</i> (facing right)	Vombatidae	A
1977b	\$7	Same species (facing left)		A
1977c	\$7	Same species (facing front)		A
1977d	\$7	Same species (facing right head down)		A
2002	SS \$35	Coarse-haired Wombat, <i>Vombatus ursinus</i>	Vombatidae	A
	Margin	Top: Same species		Z
1978a	\$7	Red Kangaroo, <i>Macropus rufus</i>	Macropodidae	A
1978b	\$7	Same species (head only)		A
1978c	\$7	Eastern Grey Kangaroo, <i>Macropus giganteus</i>	Macropodidae	A
1978d	\$7	Same species (hopping to right)		A
2003	SS \$35	Red Kangaroo, <i>Macropus rufus</i>	Macropodidae	A
	Margin	Top: Same species		Z
1979a	\$7	New Zealand Sea Lion, <i>Phocarctos hookeri</i>	Otariidae	A
1979b	\$7	Galapagos Sea Lion, <i>Zalophus wolfebaeki</i>	Otariidae	(new) A
1979c	\$7	Steller Sea Lion, <i>Eumetopias jubatus</i>	Otariidae	A
1979d	\$7	Australian Sea Lion, <i>Neophoca cinerea</i>	Otariidae	A
2004	SS \$35	California Sea Lion, <i>Zalophus californianus</i>	Otariidae	A
	Margin	Top: Australian Sea Lion, <i>Neophoca cinerea</i>	Otariidae	Z
1981a	\$7	Corbett's Tiger, <i>Panthera tigris</i> ssp. <i>corbetii</i>	Felidae	A
1981b	\$7	Malayan Tiger, <i>Panthera tigris</i> ssp. <i>jacksoni</i>	Felidae	A
1981c	\$7	Bengal Tiger, <i>Panthera tigris</i> ssp. <i>tigris</i>	Felidae	A
1981d	\$7	White Bengal Tiger, <i>Panthera tigris</i> var.	Felidae	A
2006	SS \$35	Siberian Tiger, <i>Panthera tigris</i> ssp. <i>altaica</i>	Felidae	A
	Margin	Top: Bengal Tiger, <i>Panthera tigris</i> ssp. <i>tigris</i>	Felidae	Z

**SOLOMON ISLANDS** (continued)

1983a	\$7	Dingo, <i>Canis lupus dingo</i> (front paws on rock)	Canidae	A
1983b	\$7	Same species (head only)		A
1983c	\$7	Same species (pair)		A
1983d	\$7	Same species (front paw raised)		A
2008	SS \$35	Dingo, <i>Canis lupus dingo</i>	Canidae	A
	Margin	Top: Same species		Z
1994a	\$7	Sumatran Orangutan, <i>Pongo abelii</i>	Hominidae	A
1994c	\$7	Wild Dog, <i>Lycaon pictus</i>	Canidae	A
2019	SS \$35	Red Wolf, <i>Canis lupus rufus</i>	Canidae	A
	Margin	Top: Black Rhinoceros, <i>Diceros bicornis</i>	Rhinocerotidae	Z

**S. GEORGIA & S. SANDWICH ISLANDS 2015 December 21** (Air Post Stamps) (Set/6)

C10	(70p)	Leopard Seal, <i>Hydrurga leptonyx</i>	Phocidae	A
-----	-------	----------------------------------------	----------	---

**SRI LANKA****2016 January 26** (Wildlife of Kumana National Park) (Set/7 & SS/7)

1998	7r	Blue Whale, <i>Balaenoptera musculus</i>	Balaenopteridae	A
2002	25r	Asian Elephant, <i>Elephas maximus</i>	Elephantidae	A
2003	35r	Leopard, <i>Panthera pardus</i>	Felidae	A
2004	40r	Sloth Bear, <i>Melursus ursinus</i>	Ursidae	A
2004a		SS/7 (Sc#1998–2004)		

**SOUTH AFRICA****2015 March 3** (Endangered Animals) (MS/6)

1542a	(3r)	Oribi, <i>Ourebia ourebi</i>	Bovidae	A
1542b	(3r)	Black Rhinoceros, <i>Diceros bicornis</i>	Rhinocerotidae	A

**SWITZERLAND****2016 May 12** (Nocturnal Animals) (Set/4)

1602	100c	Garden Dormouse, <i>Eliomys quercinus</i>	Gliridae	A
1604	200c	Western European Hedgehog, <i>Erinaceus europaeus</i>	Erinaceidae	A

**SYRIA****2011 September 18** (Cetaceans) (Block/6)

1693a	£25	Sperm Whale, <i>Physeter catodon</i>	Physeteridae	A
1693b	£25	Long-finned Pilot Whale, <i>Globicephala melas</i>	Delphinidae	A
1693c	£25	Striped Dolphin, <i>Stenella coeruleoalba</i>	Delphinidae	A
1693d	£25	Risso's Dolphin, <i>Grampus griseus</i>	Delphinidae	A
1693e	£25	Common Bottlenose Dolphin, <i>Tursiops truncatus</i>	Delphinidae	A
1693f	£25	Killer Whale, <i>Orcinus orca</i>	Delphinidae	A

**2014 September 23** (Mammals) (Vert strip/3)

1731a	£75	Long-tailed Weasel, <i>Mustela frenata</i>	Mustelidae	A
1731b	£80	Red Fox, <i>Vulpes vulpes</i>	Canidae	A
1731c	£170	Golden Jackal, <i>Canis aureus</i>	Canidae	A

**TAJIKISTAN****2014 October 3** (Mushrooms)

431	2.50s	Long-eared Hedgehog, <i>Hemiechinus auritus</i> (with mushroom)	Erinaceidae	B
-----	-------	-----------------------------------------------------------------	-------------	---

**2015 April 18** (Flora & Fauna—2015 Stamp Expos)

439c	3.50s	R: Asian Elephant, <i>Elephas maximus</i>	Elephantidae	B
		L: Leopard, <i>Panthera pardus</i>	Felidae	B
439d	3.50s	R: Giant Panda, <i>Ailuropoda melanoleuca</i>	Ursidae	B
		L: Leopard, <i>Panthera pardus</i>	Felidae	B
439		MS/6 (Sc#439c–d & 2ea Sc#439a–b)		

**TONGA****2016 January 14** (2nd Summit of the IPIC Forum) (Set/4 & SS/4)

1284	2.25pa	Red Panda, <i>Ailurus fulgens</i>	Ailuridae	A
1285	4.20pa	Tiger, <i>Panthera tigris</i>	Felidae	A
1287	6.50pa	Leopard, <i>Panthera pardus</i>	Felidae	A



<b>TONGA (Niufo'ou)</b>		<b>2016 January 14</b> (2nd Summit of the IPIC Forum) (Set/4 & SS/4)		
335	2.25pa	Asian Elephant, <i>Elephas maximus</i>	Elephantidae	A
336	4.20pa	Indian Rhinoceros, <i>Rhinoceros unicornis</i>	Rhinocerotidae	A
337	5pa	Lion, <i>Panthera leo</i>	Felidae	A
<b>TURKS &amp; CAICOS ISLANDS</b>		<b>2015 December 1</b> (New Year 2016—Year of the Monkey) (MS/4)		
1539a	75c	Stylized Green Monkey, <i>Chlorocebus sabaues</i> (denom magenta)	Cercopithecidae	S
1539b	75c	Stylized same species (denom green)		S
1539c	75c	Stylized same species (denom red)		S
1539d	75c	Stylized same species (denom blue)		S
<b>TUVALU</b>		<b>2015 November 2</b> (Humpback Whale) (MS/6 & SS/1)		
1351a	\$1.40	Humpback Whale, <i>Megaptera novaeangliae</i> (turning right)	Balaenopteridae	A
1351b	\$1.40	Same species (turning upwards left)		A
1351c	\$1.40	Same species (diving upside down right)		A
1351d	\$1.40	Same species (diving right)		A
1351e	\$1.40	Same species (pair)		A
1351f	\$1.40	Same species (upside down left)		A
1352	SS \$4.50	Humpback Whale, <i>Megaptera novaeangliae</i>	Balaenopteridae	A
<b>UNITED STATES</b>		<b>2016 June 2</b> (National Park Service Centenary) (pane/16 + label)		
5080n	(47c)	American Bison, <i>Bison bison</i>	Bovidae	A
<b>URUGUAY</b>		<b>2015 June 5</b> (Wetlands Fauna) (MS/10 + 3 labels)		
2514f	15p	Capybara, <i>Hydrochoerus hydrochaeris</i>	Caviidae	A
<b>UZBEKISTAN</b>		<b>2016 January 22</b> (Fauna) (Set/4)		
795	1200s	Steppe Polecat, <i>Mustela eversmannii</i>	Mustelidae	A
<b>ZAMBIA</b>		<b>2012 October</b> (Animals) (part of extended definitive set)		
1137	3500k	Boehm's Bush Squirrel, <i>Paraxerus boehmi</i>	Sciuridae	(new) A
1140	3500k	Gambian Sun Squirrel, <i>Heliosciurus gambianus</i>	Sciuridae	A
		<b>2014 June 26</b> (Animals) (part of extended definitive set)		
1194	2,50k	Lion <i>Panthera leo</i>	Felidae	A
1201	4.95k	Leopard, <i>Panthera pardus</i>	Felidae	A



# ORNITHOLOGY

Editor

Glenn G. Mertz, BU1455

Corrections/Updates



## KOSOVO – Vol. 60(4), p.155

**Correction:** Sc#160 was originally listed as a Red-rumped Swallow (*Cecropis daurica*) on the €1 value of the 2010 September 23 issue. In a current review by Chris Gibbins of “Birds of the World,” he found that the image on the stamp was from an image of a cave swallow and therefore, he has updated his website description to Cave Swallow. I also reviewed the two birds on Google and I agree with Chris and Kjell that the bird on Sc#160 is a Cave Swallow (*Petrochelidon fulva*).

## NIGER – Vol. 65(2), p.117–18

**Update:** Sc#1283a–d & Sc#1308 has been assigned to the MS/4 and SS, respectively, for the 2013 September 30 issue.

## ST. THOMAS & PRINCE – Vol. 65(2), p.123

**Update:** The first listing on this page has been assigned Sc#2676a–d & Sc#2694 for the MS/4 and SS. The second listing on this page has been assigned Sc#2675a–d & Sc#2693 for the MS/4 and SS. The third listing on the page has been assigned Sc#2669b, d, c, a, for the strip of four based on the order I listed them; Sc#2669e for the SS/4; Sc#2669f for the SS/8 (2ea of a–d + WWF panda emblem); and Sc#2670 for SS with 96000d value.

## SERBIA – Vol. 60(3), p.97

**Correction:** Sc#507b, the 33 dinar stamp was listed as a Black Redstart, *Phoenicurus ochruros*. Correct this description to a Common Redstart, *Phoenicurus phoenicurus*.

## TUVALU – Vol. 64(3), p.188

**Correction:** Sc#1295a was incorrectly listed with a value of \$1.00. The correct value is \$1.40.

### New Issues

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

#### ASCENSION

**2016 February 22 (WWF) (Set/4 & Strip/4)**

**A**

Set stamps issued with white frames. Strip is without white frames. Both have the WWF panda emblem.

1153	20p	Red-footed Booby, <i>Sula sula</i> (white frame)	Sulidae
1154	50p	Same species (white frame)	
1155	55p	Same species (white frame)	
1156	2£	Same species (white frame)	
1157a	20p	Same species (without frame)	
1157b	50	Same species (without frame)	
1157c	55p	Same species (without frame)	
1157d	2£	Same species (without frame)	

#### KENYA

**2014 October (Birds) (Set/9)**

**A**

All depict birds issued in prior years by Kenya, but in different arrangements on the stamp. Each stamp has three punched holes in the lower left.

878	30sh	Red-and-yellow Barbet, <i>Trachyphonus erythrocephalus</i>	Capitonidae
879	35sh	Scarlet-chested Sunbird, <i>Chalcomitra senegalensis</i> (Cap: <i>Nectarinia s.</i> )	Nectariniidae
880	50sh	Eastern Yellow-billed Hornbill, <i>Tockus flavirostris</i>	Bucerotidae
881	55sh	Greater Honeyguide, <i>Indicator indicator</i>	Indicatoridae

**KENYA (continued)**

882	65sh	Superb Starling, <i>Lamprotornis superbus</i> (Cap: <i>Spreo s.</i> )	Sturnidae
883	70sh	African Fish-Eagle, <i>Haliaeetus vocifer</i>	Accipitridae
884	80sh	Lesser Flamingo, <i>Phoenicopterus minor</i> (Cap: <i>Phoeniconaias</i> )	Phoenicopteridae
885	100sh	Hadada Ibis, <i>Bostrychia hagedash</i>	Threskiornithidae
886	110sh	Ross's Turaco, <i>Musophaga rossae</i>	Musophagidae

**KOREA (North) 2014 January 20 (Fruits & Vegetables) (Bklt/6) C**

5236	10w	Eurasian Tree Swallow, <i>Passer montanus</i> (slightly stylized)	Passeridae
5241a		Bklt/6 (Sc#5236–41)	

**2014 August 5 (WWF) (Horiz strip/4 & Bklt/4) A**

5299a	10w	Red-crowned Crane, <i>Grus japonensis</i> (in flight)	Gruidae
5299b	30w	Same species (adult & chick)	
5299c	50w	Same species (adults in water)	
5299d	110w	Same species (adults & chicks)	
5299e		Bklt/4 (Sc#5299a–d)	

**KOREA (South) 2014 November 20 A**

2193B	400w	Fairy Pitta, <i>Pitta nympha</i>	Pittidae
-------	------	----------------------------------	----------

**2015 April 24 (50th anniv. Diplomatic Relations with Bolivia) (Pair) A**

A MS/9 stamps, five of the Merganser and four of the Cotinga, was also issued, but Scott did not assign a number. Both bird species also in Bolivia joint issue.

2443a	(300w)	Palkachupa Cotinga, <i>Phibalura flavirostris</i>	Cotingidae	Vol. 64(2)
		(This is a recent split from the Swallow-tailed Cotinga)		
2443b	(300w)	Scaly-sided Merganser, <i>Mergus squamatus</i>	Anatidae	Vol. 64(2)
		(This bird was previously shown on a Russian hunting stamp)		

**KYRGYZSTAN 2015 November 28 (WWF) (Set/4 & SS/8) A**

503	36s	Whooper Swan, <i>Cygnus cygnus</i> (three in flight)	Anatidae
504	39s	Same species (adults & chicks in water)	
505	48s	Same species (adult in water)	
506	117s	Same species (adult extending wings)	
506a		SS/8 (2ea Sc#503–06)	

**LATVIA 2016 February 19 (Latvian Natural History Museum) A**

929	1.71€	Black Grouse, <i>Tetrao tetrix</i> (stuffed ♂ & ♀ specimens)	Phasianidae
		White Wagtail, <i>Motacilla alba</i> (logo at LR)	Motacillidae

**MACEDONIA 2015 April 21 (Pigeons) (Vert strip/4) A**

677a	11d	Common Wood-Pigeon, <i>Columba palumbus</i>	Columbidae
677b	20d	Stock Dove, <i>Columba oenas</i>	Columbidae
677c	50d	Rock Pigeon, <i>Columba livia</i>	Columbidae
677d	100d	Rock Pigeon, <i>Columba livia</i>	Columbidae

**2015 April 23 (Birds) (Set/2) A**

680	31d	Common Redpoll, <i>Acanthis flammea</i> (Cap: <i>Serinus canaria</i> )	Fringillidae
681	50d	European Goldfinch, <i>Spinus carduelis</i> (Cap: <i>Serinus canaria</i> )	Fringillidae

**MALAWI 2014 April 25 (Lake Malawi) (Set/10) A**

789	450k	African Fish-Eagle, <i>Haliaeetus vocifer</i>	Accipitridae
794	860k	Same species	

**MALAYSIA 2015 February 16 (Farm Animals) (Set/3) A**

1534	60sc	Swan Goose, <i>Anser cygnoides</i>	Anatidae
1536	\$1.20	Red Junglefowl, <i>Gallus gallus</i>	Phasianidae



<b>MALAYSIA</b> (continued)		<b>2015 June 25</b> (Birds) (Set/3 & SS/1)		<b>A</b>
1554	60c	Black-crowned Night-Heron, <i>Nycticorax nycticorax</i>	Ardeidae	
1555	70c	Striated Heron, <i>Butorides striata</i>	Ardeidae	
1556	80c	Gray Heron, <i>Ardea cinerea</i>	Ardeidae	
1557	SS \$5	Cinnamon Bittern, <i>Ixobrychus cinnamomeus</i>	Ardeidae	
<b>MAURITIUS</b>		<b>2015 September 25</b> (300th anniv. French Landing on Mauritius)		<b>C</b>
Joint issue with France (Sc#4874), see Vol. 65(1).				
1147	17r	White-tailed Tropicbird, <i>Phaethon lepturus</i>	Phaethontidae	
<b>MICRONESIA</b>		<b>2015 July 13</b> (Birds of Micronesia) (MS/6 & SS/1)		<b>A</b>
1169a	\$1	White Tern, <i>Gygis alba</i>	Laridae	
1169b	\$1	Red Junglefowl, <i>Gallus gallus</i>	Phasianidae	
1169c	\$1	Little Pied Cormorant, <i>Phalacrocorax melanoleucos</i>	Phalacrocoracidae	
1169d	\$1	Western Swamphen, <i>Porphyrio porphyrio</i>	Rallidae	
1169e	\$1	Chestnut Munia, <i>Lonchura atricapilla</i>	Estrildidae	
1169f	\$1	Réunion Gray White-eye, <i>Zosterops borbonicus</i>	Zosteropidae	
1170	SS \$3.50	Blue-faced Parrotfinch, <i>Erythrura trichroa</i>	Estrildidae	
<b>MOLDOVA</b>		<b>2015 September 25</b> (Birds) (Set/4 & SS/1)		<b>A</b>
878	1.20L	European Starling, <i>Sturnus vulgaris</i>	Sturnidae	
879	1.75L	Eurasian Bullfinch, <i>Pyrrhula pyrrhula</i>	Fringillidae	
880	4L	Eurasian Blue Tit, <i>Cyanistes caeruleus</i> (Cap: <i>Parus c.</i> )	Paridae	
881	5.75L	Bohemian Waxwing, <i>Bombycilla garrulus</i>	Bombycillidae	
882	SS 5.75L	Sky Lark, <i>Alauda arvensis</i>	Alaudidae	
<b>MONTENEGRO</b>		<b>2015 March 12</b>		<b>A</b>
380	95c	Greater Flamingo, <i>Phoenicopterus roseus</i>	Phoenicopteridae	
<b>NAMIBIA</b>		<b>2014 October 1</b> (Kingfishers) (Set/5)		<b>A</b>
1294	(\$5.70)	Pied Kingfisher, <i>Ceryle rudis</i> (inscribed "Zone A")	Alcedinidae	
1295	(\$6.40)	Half-collared Kingfisher, <i>Alcedo semitorquata</i> (inscribed "Postcard Rate")	Alcedinidae	
1296	(\$6.60)	Woodland Kingfisher, <i>Halcyon senegalensis</i> (inscr. "Zone B")	Alcedinidae	
1297	(\$7.70)	Malachite Kingfisher, <i>Corythornis cristatus</i> (inscr. "Zone C")	Alcedinidae	
1298	(\$28.30)	Giant Kingfisher, <i>Megaceryle maximus</i> (inscribed "Inland Registered Mail")	Alcedinidae	
		<b>2015 May 15</b> (Bee-eaters) (Set/5)		<b>A</b>
1302	(\$3.50)	White-fronted Bee-eater, <i>Merops bullockoides</i> (inscribed "Standard Mail")	Meropidae	
1303	\$5.70	Southern Carmine Bee-eater, <i>Merops nubicoides</i>	Meropidae	
1304	\$6.60	Swallow-tailed Bee-eater, <i>Merops hirundineus</i>	Meropidae	
1305	\$7.70	Little Bee-eater, <i>Merops pusillus</i>	Meropidae	
1306	(\$28.50)	European Bee-eater, <i>Merops apiaster</i> (inscribed "Inland Registered Mail")	Meropidae	
		<b>2015 October 1</b> (Coursers) (Set/4)		<b>A</b>
1320	(\$6.05)	Burchell's Courser, <i>Cursorius rufus</i> (inscribed "Zone A")	Glareolidae	Vol. 64(4)
1321	(\$6.80)	Three-banded Courser, <i>Rhinoptilus cinctus</i> (inscribed "Postcard Rate")	Glareolidae	Vol. 64(4)
1322	(\$7.00)	Double-banded Courser, <i>Smutsornis africanus</i> (inscribed "Zone B")	Glareolidae	Vol. 64(4)
1323	(\$8.20)	Bronze-winged Courser, <i>Rhinoptilus chalcopterus</i> (inscribed "Zone C")	Glareolidae	Vol. 64(4)

<b>NETHERLANDS</b>			<b>2015 April 28</b> (Flora & Fauna) (MS/10 & 5ea Bklt/2)	<b>A</b>
1494b	(69c)	Great Cormorant, <i>Phalacrocorax carbo</i>	Phalacrocoracidae	
1494d	(69c)	Eurasian Reed-Warbler, <i>Acrocephalus scirpaceus</i>	Acrocephalidae	
1494h	(69c)	Great Crested Grebe, <i>Podiceps cristatus</i>	Podicipedidae	
1494		MS/10 (Sc#1494a-j) (perf 13¼×12¾)		
1494l	(69c)	Great Cormorant, <i>Phalacrocorax carbo</i>	Phalacrocoracidae	
1494y		Bklt/2 (Sc#1494k-l) (perf 14½×14¼)		
1494n	(69c)	Eurasian Reed-Warbler, <i>Acrocephalus scirpaceus</i>	Acrocephalidae	
1494x		Bklt/2 (Sc#1494m-n) (perf 14½×14¼)		
1494r	(69c)	Great Crested Grebe, <i>Podiceps cristatus</i>	Podicipedidae	
1494v		Bklt/2 (Sc#1494q-r) (perf 14½×14¼)		
<b>NEVIS</b>			<b>2014 September 3</b> (Macaws) (2ea MS/4 & 2ea SS/2)	<b>A</b>
1823a	\$3.25	Blue-and-yellow Macaw, <i>Ara ararauna</i>	Psittacidae	
1823b	\$3.25	Red-shouldered Macaw, <i>Diopsittaca nobilis</i>	Psittacidae	
1823c	\$3.25	Red-fronted Macaw, <i>Ara rubrogenys</i>	Psittacidae	
1823d	\$3.25	Red-and-green Macaw, <i>Ara chloropterus</i>	Psittacidae	
1824a	\$3.25	Lear's Macaw, <i>Anodorhynchus leari</i>	Psittacidae	
1824b	\$3.25	Hyacinth Macaw, <i>Anodorhynchus hyacinthinus</i>	Psittacidae	
1824c	\$3.25	Blue-headed Macaw, <i>Primolius couloni</i>	Psittacidae	
1824d	\$3.25	Great Green Macaw, <i>Ara ambiguus</i>	Psittacidae	
1825a	SS \$5	Scarlet Macaw, <i>Ara macao</i>	Psittacidae	
1825b	SS \$5	Golden-collared Macaw, <i>Primolius auricollis</i>	Psittacidae	
1826a	SS \$5	Blue-and-yellow Macaw, <i>Ara ararauna</i>	Psittacidae	
1826b	SS \$5	Blue-throated Macaw, <i>Ara glaucogularis</i>	Psittacidae	
			<b>2015 March 2</b> (Pink Birds) (MS/6 & SS/1)	<b>A</b>
1865a	\$4	Scarlet Ibis, <i>Eudocimus ruber</i>	Threskiornithidae	
1865b	\$4	American Flamingo, <i>Phoenicopterus ruber</i>	Phoenicopteridae	
1865c	\$4	Scarlet Ibis, <i>Eudocimus ruber</i>	Threskiornithidae	
1865d	\$4	Roseate Spoonbill, <i>Platalea ajaja</i>	Threskiornithidae	
1865e	\$4	Scarlet Ibis, <i>Eudocimus ruber</i>	Threskiornithidae	
1865f	\$4	American Flamingo, <i>Phoenicopterus ruber</i>	Phoenicopteridae	
1866	SS \$10	American Flamingo, <i>Phoenicopterus ruber</i>	Phoenicopteridae	
			<b>2015 December 17</b> (Central American Kingfishers) (MS/6 & SS/1)	<b>A</b>
1892a	\$3.15	Belted Kingfisher, <i>Megasceryle alcyon</i>	Alcedinidae	
1892b	\$3.15	Ringed Kingfisher, <i>Megasceryle torquatus</i>	Alcedinidae	
1892c	\$3.15	Rufous-collared Kingfisher, <i>Actenoides concretus</i>	Alcedinidae	
		(Cap: Green & Rufous Kingfisher, <i>Chloroceryle india</i> )		
1892d	\$3.15	Green Kingfisher, <i>Chloroceryle americana</i> (showing breast)	Alcedinidae	
1892e	\$3.15	Amazon Kingfisher, <i>Chloroceryle amazona</i>	Alcedinidae	
1892f	\$3.15	Green Kingfisher, <i>Chloroceryle americana</i> (showing back)	Alcedinidae	
1893	SS \$10	Belted Kingfisher, <i>Megasceryle alcyon</i>	Alcedinidae	
<b>NIGER</b>			<b>2013 September 30</b> (Birds of Niger) (MS/4 & SS/1)	<b>A</b>
1283a	750fr	Blue-breasted Kingfisher, <i>Halcyon malimbica</i>	Alcedinidae	
1283b	750fr	L: Golden Nightjar, <i>Caprimulgus eximius</i>	Caprimulgidae	
		R: Bar-tailed Lark, <i>Ammomanes cinctura</i>	Alaudidae	
1283c	750fr	Hamerkop, <i>Scopus umbretta</i>	Scopidae	
1283d	750fr	Violet Turaco, <i>Musophaga violacea</i>	Musophagidae	
1308	SS 2500fr	Striped Kingfisher, <i>Halcyon chelicuti</i>	Alcedinidae	
	Margin	UR: Hamerkop, <i>Scopus umbretta</i>	Scopidae	
		LL & LR: Abyssinian Ground-Hornbill, <i>Bucorvus abyssinicus</i>	Bucorvidae	

<b>NIGER</b> (continued)			<b>2015 December 20</b> (Climate Change) (SS/1)	<b>A</b>
1359	SS 2500fr	Gentoo Penguin, <i>Pygoscelis papua</i>	Spheniscidae	
<b>NORWAY</b>			<b>2015 October 3</b> (Birds) (Horiz strip/4) (s/a)	<b>A</b>
1779	(9.50k)	King Eider, <i>Somateria spectabilis</i> ♂ & ♀ (inscr. "B innland")	Anatidae	
1780	(9.50k)	Common Eider, <i>Somateria mollissima</i> ♂ & ♀ (inscr. "B innland")	Anatidae	
1781	(10.50k)	White Wagtail, <i>Motacilla alba</i> (inscribed "A innland")	Motacillidae	
1782	(10.50k)	Northern Wheatear, <i>Oenanthe oenanthe</i> (inscribed "A innland")	Muscicapidae	
<b>PALAU</b>			<b>2015 June 15</b> (Birds of the South Pacific) (MS/6 & SS/1)	<b>A</b>
1279a	65c	Eclectus Parrot, <i>Eclectus roratus</i>	Psittaculidae	
1279b	65c	Brahminy Kite, <i>Haliastur indus</i>	Accipitridae	
1279c	65c	Whiskered Tern, <i>Chlidonias hybrida</i>	Laridae	
1279d	65c	Black-winged Stilt, <i>Himantopus himantopus</i>	Recurvirostridae	
1279e	65c	Collared Kingfisher, <i>Todiramphus chloris</i>	Alcedinidae	
1279f	65c	Black Kite, <i>Milvus migrans</i>	Accipitridae	
1280	SS \$4	Sulphur-crested Cockatoo, <i>Cacatua galerita</i>	Cacatuidae	
<b>PALESTINIAN AUTHORITY</b>			<b>2013 June 3</b> (Flora & Fauna) (Set/6 & 2ea SS/1)	<b>A</b>
219	200f	Green Bee-eater, <i>Merops orientalis</i>	Meropidae	
223	SS 1000f	Short-toed Snake-Eagle, <i>Circaetus gallicus</i>	Accipitridae	
<b>PARAGUAY</b>			<b>2015 June 12</b> (Junior Chamber International Centenary) (SS/1)	<b>A</b>
3025	SS 3000g	Turquoise-fronted Parrot, <i>Amazona aestiva</i>	Psittacidae	
<b>PHILIPPINES</b>			<b>2015 November 11</b> (Philippine Wildlife) (MS/4)	<b>A</b>
3634a	15p	Cebu Flowerpecker, <i>Dicaeum quadricolor</i>	Dicaeidae	
<b>ROMANIA</b>			<b>2015 February 6</b> (Songbirds) (Set/4)	<b>A</b>
A SS/4 (Sc#5654–57) issued in limited quantities, but not listed by Scott. Each stamp also issued in MS/5 + label.				
5654	4.50L	Hawfinch, <i>Coccothraustes coccothraustes</i>	Fringillidae	
5655	5L	Yellowhammer, <i>Emberiza citronella</i>	Emberizidae	
5656	8.10L	Bohemian Waxwing, <i>Bombycilla garrulus</i>	Bombycillidae	
5657	9.10L	Eurasian Bullfinch, <i>Pyrrhula pyrrhula</i>	Fringillidae	
			<b>2015 April 10</b> (Protected Wildlife: Pelicans) (Set/4 & SS/1)	<b>A</b>
A SS/4 (Sc#5672–75) issued in limited quantities, but not listed by Scott. Each stamp also issued in MS/5 + label. The SS has two emblems, one for UNESCO and one for the World Heritage Convention.				
5672	3.60L	Great White Pelican, <i>Pelecanus onocrotalus</i>	Pelecanidae	
5673	5L	Dalmatian Pelican, <i>Pelecanus crispus</i>	Pelecanidae	
5674	8.10L	Great White Pelican, <i>Pelecanus onocrotalus</i>	Pelecanidae	
5675	9.10L	Dalmatian Pelican, <i>Pelecanus crispus</i>	Pelecanidae	
5676	SS 9.10L	Dalmatian Pelican, <i>Pelecanus crispus</i>	Pelecanidae	
			<b>2015 August 21</b> (Birds) (Set/4 & SS/1)	<b>A</b>
A SS/4 (Sc#5705–08) issued in limited quantities, but not listed by Scott. Each stamp also issued in MS/5 + label.				
5705	3.30L	Common Tern, <i>Sterna hirundo</i>	Laridae	
5706	4.30L	Yellow-legged Gull, <i>Larus michahellis</i>	Laridae	
5707	4.70L	Pied Avocet, <i>Recurvirostra avosetta</i>	Recurvirostridae	
5708	8.10L	Ruddy Shelduck, <i>Tadorna ferruginea</i>	Anatidae	
5709	SS 9.10L	Mute Swan, <i>Cygnus olor</i>	Anatidae	



<b>ST. KITTS</b>		<b>2014 December 31</b> (Seagulls) (2ea MS/4 & 2ea SS/1)	<b>A</b>
896a	\$3.25	Black-tailed Gull, <i>Larus crassirostris</i>	Laridae
896b	\$3.25	California Gull, <i>Larus californicus</i>	Laridae
896c	\$3.25	Gray-hooded Gull, <i>Chroicocephalus cirrocephalus</i> (Cap: Gray-headed Gull)	Laridae
896d	\$3.25	Herring Gull, <i>Larus argentatus</i> (Cap: European Herring Gull)	Laridae
897a	\$3.25	Yellow-legged Gull, <i>Larus michahellis</i>	Laridae
897b	\$3.25	Mew Gull, <i>Larus canus</i> (Cap: Common Gull)	Laridae
897c	\$3.25	Audouin's Gull, <i>Ichthyaeetus audouinii</i>	Laridae
877d	\$3.25	Iceland Gull, <i>Larus glaucoides</i> (Cap: <i>Larus w</i> )	Laridae
898	SS \$10	Caspian Gull, <i>Larus cachinnans</i>	Laridae
899	SS \$10	Dolphin Gull, <i>Leucophaeus scoresbii</i>	Laridae
		<b>2015 June 1</b> (Green-throated Carib) (Single & SS/1)	<b>A</b>
914	\$1	Green-throated Carib, <i>Eulampis holosericeus</i>	Trochilidae
		LL: Magnificent Frigatebird, <i>Fregata magnificens</i>	Fregatidae
		Top: Red-billed Tropicbird, <i>Phaethon aethereus</i> (in flight)	Phaethontidae
915	SS \$10	Green-throated Carib, <i>Eulampis holosericeus</i>	Trochilidae
		<b>2015 September 8</b> (Central American Owls) (2ea MS/4 & 2ea SS/1)	<b>A</b>
924a	\$3.25	Barn Owl, <i>Tyto alba</i>	Tytonidae
924b	\$3.25	Burrowing Owl, <i>Athene cunicularia</i>	Strigidae
924c	\$3.25	Central American Pygmy-Owl, <i>Glaucidium griseiceps</i>	Strigidae
924d	\$3.25	Great Horned Owl, <i>Bubo virginianus</i>	Strigidae
924		MS/4 (Sc#924a–d) (white background) with feathers in margin	
	Margin	LL: Central American Pygmy-Owl, <i>Glaucidium griseiceps</i>	Strigidae
925a	\$3.25	Barred Owl, <i>Strix varia</i>	Strigidae
925b	\$3.25	Burrowing Owl, <i>Athene cunicularia</i>	Strigidae
925c	\$3.25	Bare-legged Owl, <i>Margarobyas lawrencii</i>	Strigidae
925d	\$3.25	Barn Owl, <i>Tyto alba</i>	Tytonidae
925		MS/4 (Sc#925a–d) (black frames)	
	Margin	UL & LL: Barn Owl, <i>Tyto alba</i>	Tytonidae
926	SS \$10	Ashy-faced Owl, <i>Tyto glaucops</i>	Tytonidae
	Margin	UR: Short-eared Owl, <i>Asio flammeus</i>	Strigidae
927	SS \$10	Short-eared Owl, <i>Asio flammeus</i>	Strigidae
	Margin	L: Ashy-faced Owl, <i>Tyto glaucops</i>	Tytonidae
<b>ST. PIERRE &amp; MIQUELON</b>		<b>2015 January 17</b> (American Redstart) (Single)	<b>A</b>
Photo by Patric Boez. Offset by Phila@Post.			
1008	38c	American Redstart, <i>Setophaga ruticilla</i> (Cap/Syn: <i>Paruline flamboyante</i> )	Parulidae
		<b>2016 January 29</b> (Purple Finch) (Single)	<b>A</b>
Photo by Patrick Hacala. Offset by Phila@Post.			
1022	40c	Purple Finch, <i>Haemorhous purpureus</i> (Cap/Syn: <i>Carpodacus purpureus</i> )	Fringillidae
<b>SLOVAKIA</b>		<b>2015 October 9</b> (Nature Protection) (SS/2 + 5 labels)	<b>A</b>
723b	65c	Black Stork, <i>Ciconia nigra</i>	Ciconiidae

**SOUTH AFRICA****2015 March 3** (Animal Poaching Awareness) (MS/6)**A**

Each stamp inscribed "Standard Postage."

1542c	(3r)	Gray Crowned-Crane, <i>Balearica regulorum</i>	Gruidae
1542d	(3r)	Southern Ground-Hornbill, <i>Bucorvus leadbeateri</i>	Bucorvidae
1542f	(3r)	Brown-necked Parrot, <i>Poicephalus robustus</i>	Psittacidae
Margin	UL:	U/I Eagle	

**SURINAME****2016 February 17** (Birds) (Block/12)**A**

The full sheet containing two blocks has four labels featuring four of the birds that separate the blocks.

1493a	\$2.25	Roseate Spoonbill, <i>Platalea ajaja</i> (Cap: <i>Ajaia ajaja</i> )	Threskiornithidae	
1493b	\$2.75	Great Egret, <i>Ardea alba</i> (also on label)	Ardeidae	
1493c	\$3.25	Cocoi Heron, <i>Ardea cocoi</i>	Ardeidae	
1493d	\$3.75	Southern Screamer, <i>Chauna torquata</i> (also on label)	Anhimidae	
1493e	\$4.25	White-faced Whistling-Duck, <i>Dendrocygna viduata</i>	Anatidae	
1493f	\$4.75	Snowy Egret, <i>Egretta thula</i>	Ardeidae	
1493g	\$5.25	Magnificent Frigatebird, <i>Fregata magnificens</i>	Fregatidae	
1493h	\$5.75	Wood Stork, <i>Mycteria americana</i>	Ciconiidae	
1493i	\$6.25	Neotropic Cormorant, <i>Phalacrocorax brasilianus</i> (also on label)	Phalacrocoracidae	
1493j	\$6.75	Magellanic Penguin, <i>Spheniscus magellanicus</i>	Spheniscidae	
1493k	\$7.25	Whistling Heron, <i>Syrigma sibilatrix</i> (also on label)	Ardeidae	Vol. 65(2)
1493l	\$7.75	Plumbeous Ibis, <i>Theristicus caerulescens</i>	Threskiornithidae	

**SWEDEN****2016 January 14** (s/a coil)**A**

2767	50k	White-tailed Eagle, <i>Haliaeetus albicilla</i>	Accipitridae
------	-----	-------------------------------------------------	--------------

**SWITZERLAND****2016 May 12** (Nocturnal Animals) (Set/4)**A**

1601	85c	Tawny Owl, <i>Strix aluco</i>	Strigidae
------	-----	-------------------------------	-----------

**2016 May 12** (Lake Constance) (Horiz strip/3)**B**

1605a	85c	Mute Swan, <i>Cygnus olor</i>	Anatidae
1605c	85c	Black-headed Gull, <i>Chroicocephalus ridibundus</i>	Laridae

**SYRIA****2013** (Birds) (Block/6)**A**

1716a	£75	European Serin, <i>Serinus serinus</i> (Cap: <i>Serinus syriacus</i> )	Fringillidae
1716b	£75	European Starling, <i>Sturnus vulgaris</i>	Sturnidae
1716c	£75	European Robin, <i>Erithacus rubecula</i>	Muscicapidae
1716d	£75	Yellow-breasted Chat, <i>Icteria virens</i>	Parulidae
1716e	£75	Common Nightingale, <i>Luscinia megarhynchos</i> (Cap: <i>Megarhynchos luscinia</i> )	Muscicapidae
1716f	£75	Cinereous Bunting, <i>Emberiza cineracea</i>	Emberizidae

**TAJIKISTAN****2015 April 18** (Birds) (Pair)**A**

438a	2s	U/I Eagle species	Accipitridae
438b	2s	Eurasian Wren, <i>Troglodytes troglodytes</i>	Troglodytidae

**2016 January 9** (Eagles) (Block/4 or Vert strip/4)**A**

449a	2s	Bald Eagle, <i>Haliaeetus leucocephalus</i> (two in flight)	Accipitridae
449b	2s	Golden Eagle, <i>Aquila chrysaetos</i> (with rabbit)	Accipitridae
449c	3s	Himalayan Vulture, <i>Gyps himalayensis</i> (with fox)	Accipitridae
449d	3s	Common Buzzard, <i>Buteo buteo</i> (at nest)	Accipitridae

**THAILAND****2015 May 8** (40th anniv. Relations with N. Korea) (Pair)**A**

2854a	3b	Siamese Fireback, <i>Lophura diardi</i>	Phasianidae
2854b	3b	Northern Goshawk, <i>Accipiter gentilis</i>	Accipitridae

<b>TONGA (Niuafu'ou)</b>			<b>2016 January 14</b> (Second Summit of I.P.I.C.) (Set/4 & SS/4)	<b>B</b>
338	6.50pa	Indian Peafowl, <i>Pavo cristatus</i>	Phasianidae	
338a		SS/4 (Sc#335–38)		
			<b>2016 February 26</b> (WWF) (Set/4 & Strip/4)	<b>A</b>
Set stamps issued with white frames. Strip is without white frames. All are captioned "Black Petrel."				
339	50s	Parkinson's Petrel, <i>Procellaria parkinsoni</i>	Procellariidae	
340	2pa	Same species (white frame)		
341	2.25pa	Same species (white frame)		
342	3.50pa	Same species (white frame)		
343a	50s	Same species (without frame)		
343b	2pa	Same species (without frame)		
343c	2.25pa	Same species (without frame)		
343d	3.50pa	Same species (without frame)		
<b>TURKEY</b>			<b>2015 October 7</b> (Natural Water Conservation Areas) (SS/3)	<b>B</b>
3461c	1.25L	Black-eared Wheatear, <i>Oenanthe hispanica</i>	Muscicapidae	
<b>TUVALU</b>			<b>2015 May 25</b> (Birds of the South Pacific) (MS/6 & SS/1)	<b>A</b>
1345a	\$1.40	Red-footed Booby, <i>Sula sula</i>	Sulidae	
1345b	\$1.40	Bar-tailed Godwit, <i>Limosa lapponica</i>	Scolopacidae	
1345c	\$1.40	Buff-banded Rail, <i>Gallirallus philippensis</i>	Rallidae	
1345d	\$1.40	Brown Noddy, <i>Anous stolidus</i>	Laridae	
1345e	\$1.40	Red-tailed Tropicbird, <i>Phaethon rubricauda</i>	Phaethontidae	
1345f	\$1.40	Great Crested Tern, <i>Thalasseus bergii</i>	Laridae	
1346	SS \$4.50	Great Frigatebird, <i>Fregata minor</i> (Also in surrounds)	Fregatidae	
<b>UNITED STATES</b>			<b>2015 June 6</b> (Flannery O'Connor) (s/a)	<b>C</b>
5003	(49c)	Indian Peafowl, <i>Pavo cristatus</i> (in background)	Phasianidae	
			<b>2016 June 2</b> (100th anniv. National Park Service) (Sheet/16) (s/a)	<b>A</b>
5080p	(47c)	Great Blue Heron, <i>Ardea herodias</i>	Ardeidae	
<b>URUGUAY</b>			<b>2015 June 5</b> (Wetlands Fauna) (SS/10 + 3 labels)	<b>A</b>
2514a	15p	Scarlet-headed Blackbird, <i>Amblyramphus holosericeus</i>	Icteridae	
2514b	15p	Black Skimmer, <i>Rynchops niger</i> (Cap: <i>Rynchops niger intercedens</i> , which is a ssp.)	Laridae	
2514c	15p	Chilean Flamingo, <i>Phoenicopterus chilensis</i>	Phoenicopteridae	
2514d	15p	Snowy Egret, <i>Egretta thula</i>	Ardeidae	
2514e	15p	Plumbeous Ibis, <i>Theristicus caerulescens</i>	Threskiornithidae	
2514g	15p	Saffron-cowled Blackbird, <i>Xanthopsar flavus</i>	Icteridae	
			<b>2015 September 30</b> (Owls) (MS/8)	<b>A</b>
2524a	15p	Buff-fronted Owl, <i>Aegolius harrisii</i>	Strigidae	
2524b	15p	Great Horned Owl, <i>Bubo virginianus</i>	Strigidae	
2524c	15p	Burrowing Owl, <i>Athene cunicularia</i>	Strigidae	
2524d	15p	Tropical Screech-Owl, <i>Megascops choliba</i>	Strigidae	
2524e	15p	Barn Owl, <i>Tyto alba</i>	Tytonidae	
2524f	15p	Short-eared Owl, <i>Asio flammeus</i>	Strigidae	
2524g	15p	Ferruginous Pygmy-Owl, <i>Glaucidium brasilianum</i>	Strigidae	
2524h	15p	Striped Owl, <i>Pseudoscops clamator</i>	Strigidae	



## NEW BIRDS IN THE PHILATELIC AVIARY

Charles E. Braun, BU1364

## Corrections

During the assembly of this column for Vol. 64(4), the editor mistakenly mixed up the images and descriptions for the Burchell's, Three-banded, and Bronze-winged Coursers. Because the name of the bird on the stamp itself is easily discerned, you can match the correct description to each one.

## New Birds



**BRAZILIAN TEAL**, *Amazonetta brasiliensis* Anatidae  
St. Martin, 2016 May 25, not yet cataloged, 25c

Length: 14 to 16 inches. The male (shown) is dark brown above and speckled rufous below with a red bill and gray face and throat. The female has a dark bill and white face and throat.

Habitat: Inland ponds and small lakes in densely wooded areas.

Range: Eastern Colombia to northern Argentina. Southern birds winter closer to the equator.

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



**EASTERN CHANTING GOSHAWK**, *Melierax poliopterus* Accipitridae  
Djibouti, 2016 May 5, not yet cataloged, 280fr

Length: 18 to 20 inches, sexes alike, resident. Ash gray with a barred white belly and a black tail.

Habitat: Dry thorn woodland and savanna.

Range: Somalia to northern Tanzania.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 2.



**SHARP-TAILED GROUSE**, *Tympanuchus phasianellus*  
Phasianidae

Previously on a Saskatchewan Conservation stamp.

Canada, 2016 July 12, not yet cataloged, (85c)

Length: 16 to 19 inches, resident. The male is speckled brown with a short pointed tail and an inflatable purple neck sac.

The female lacks the neck sac.

Habitat: Open areas and forests.

Range: Alaska to Hudson Bay and Wyoming.

Reference: del Hoyo, J., A. Elliott, and J. Sargatal, Eds. Handbook of the Birds of the World, Volume 2.



**SLATY-BREASTED WOOD-RAIL** *Aramides saracura* Rallidae

St. Martin, 2016 May 25, not yet cataloged, 125c

Length: 14 to 15 inches, sexes alike, resident. Brown above and gray head and below with a rufous nape and mostly green bill.

Habitat: Swampy areas in forests and woodland.

Range: Southeastern Brazil to eastern Paraguay.

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



**SHORE PLOVER**, *Thinornis novaeseelandiae* Charadriidae

Togo, 2016 May 20, not yet cataloged, 3000fr SS

Length: 8 inches, sexes similar, resident. Gray-brown above and white below with a black face, neck, and throat and a white-edged gray-brown crown.

Habitat: Rocky shores.

Range: Rangatira Island, Chatham Islands, New Zealand.

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



**BAIRD'S SANDPIPER**, *Calidris bairdii* Scolopacidae

St. Martin, 2016 May 25, not yet cataloged. 200c

Length: 6 to 7 inches, sexes alike, migratory. Brown above and white below with a buffy breast.

Habitat: Low mountain tops, river terraces, and coastal barren areas.

Range: Breeds from northern Alaska to western Greenland. Winters in western and southern South America.

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

of the World, Volume 3.



**SCALED DOVE**, *Columbina squammata* Columbidae

St. Martin, 2016 January 6, not yet cataloged, 500c

Length: 7 to 9 inches, sexes alike, resident. Brown above and grayish pink below with a white throat and a patch of spots on the wings.

Habitat: Arid tropical savanna and thickets.

Range: Colombia to French Guiana; Central and eastern Brazil and adjacent Argentina and Paraguay.

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



**SULAWESI GROUND-DOVE**, *Gallicolumba tristigmata* Columbidae

Sierra Leone, 2016 January 28, not yet cataloged, 6000Le

Length: 13 to 14 inches, sexes alike, resident. Olive-brown above and gray below with a bright golden forehead, gold lower breast, and whitish belly.

Habitat: Lowland primary forest.

Range: Sulawesi, Indonesia.

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

**WHITE-CRESTED TURACO, *Tauraco leucolophus*** Musophagidae

Liberia, 2016 February 20, not yet cataloged, \$100

Length: 16 inches, sexes alike, resident. Violet-blue above and grass green below with a white crest and red eye-ring on a black face.

Habitat: Riverine gallery forest and wooded savannas.

Range: Southeastern Nigeria to western Kenya.

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

**LARGE HAWK-CUCKOO, *Hierococcyx sparveriioides*** Cuculidae

Sierra Leone, 2016 January 28, not yet cataloged, MS/4 (L margin)

Length: 15 to 16 inches, sexes alike, migratory. Brown above and barred white below with a rufous or rufous-streaked breast.

Habitat: Deciduous evergreen woods.

Range: Breeds from the Himalayas and China to Borneo and the Philippines. Winters from eastern India to Borneo and the Philippines.

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

**ASIAN EMERALD CUCKOO, *Chrysococcyx maculatus*** CuculidaeSierra Leone, 2016 January 28, not yet cataloged. 6000Le (Cap: *C. cupreus*)

Length: 7 inches, migratory. The male is green with a green-barred white belly; the female (shown) is green with a light rufous crown and nape and barred pale throat.

Habitat: Dense forest.

Range: Breeds from central China to the Andaman Islands and central Vietnam. Winters from southern China to Malaysia.

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

This set also includes a stamp captioned *Cacomantis merulinus* (Plaintive Cuckoo) that would be a new species, but the illustration shows a different bird, unidentified but definitely not a cuckoo.

**LEWIS'S WOODPECKER, *Melanerpes lewis*** Picidae

Central African Republic, 2016 June 20, not yet cataloged, 750fr (on left)

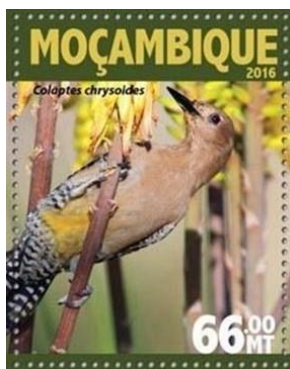
Length: 10.5 to 11.5 inches, sexes alike, migratory. Blackish above and pinkish below with a crimson face, black throat, and silver-gray neck and breast.

Habitat: Breeds in open woodlands. Winters in oak woodland and orchards.

Range: Breeds from southern British Columbia to North Dakota, Arizona, and New Mexico. Winters in the southwestern U.S.

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





**GILDED FLICKER, *Colaptes chrysoides*** Picidae  
Mozambique, 2016 January 15, not yet cataloged, 66m

Length: 10 to 12 inches, resident. The male (shown) is black-barred brownish above and black-spotted whitish below with a rufous crown and mustache and white rump. The female lacks the mustache.

Habitat: Arid areas with large cacti and yucca plants.

Range: Southeastern California to northern Mexico and Baja California.

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



**PLAIN PARAKEET, *Brotogeris tirica*** Psittacidae  
St. Martin, 2016 January 6, not yet cataloged, 500c

Length: 9 inches, sexes alike, resident. Green with bronzy green shoulders.

Habitat: Rainforests, open areas, parks, and plantations.

Range: Coastal southeastern Brazil.

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



**RED-RUFFED FRUITCROW, *Pyroderus scutatus*** Cotingidae  
Colombia, 2016 July 29, label on SS

Length: 17 to 18 inches, sexes similar, but female is smaller, resident. Black above and reddish below.

Habitat: Forest and forest borders.

Range: Colombia, central Peru, eastern Venezuela, and southeastern Brazil.

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



**CAVE SWALLOW, *Petrochelidon fulva*** Hirundinidae  
Kosovo, 2010 September 23, Sc#169, €1

Length: 5 inches, sexes alike, migratory. Glossy blackish above and cinnamon and white below with white streaks on the mantle and a cinnamon rump.

Habitat: Open areas often near water.

Range: Breeds from southern New Mexico and Texas to southern Mexico and the West Indies. U.S. birds winter in Mexico and Central America.

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



**RED-BREASTED NUTHATCH, *Sitta canadensis*** Sittidae  
Previously on a local stamp from Eynhallow, Scotland.  
United States, 2016 August 4, not yet cataloged, (47c)

Length: 5 inches, sexes similar, resident. Gray above and rufous below with a white face and a black crown and eye-stripe.

Habitat: Temperate forests.

Range: Southern Alaska to Newfoundland, western North Carolina, and New Mexico.

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



**BROWN CREEPER, *Certhia americana*** Certhiidae

Central African Republic, 2016 June 20, not yet cataloged, 750fr

Length: 5 inches, sexes alike, migratory. White-streaked brown above and whitish below.

Habitat: Coniferous forests.

Range: Breeds from southern Alaska to Newfoundland and Nicaragua. Winters in the breeding area except northern Canada.

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

**BALLMAN'S MALIMBE, *Malimbus ballmanni*** Ploceidae

Sierra Leone, 2016 May 27, not yet cataloged, 6000Le

Length: 6 to 7 inches, resident. The male is black with a yellow nape, breast, and undertail. The female (shown) lacks the yellow nape.

Habitat: Lowland evergreen forest.

Range: Extreme eastern Sierra Leone and adjacent Liberia.

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

**BLACK-HEADED WEAVER, *Ploceus melanocephalus*** PloceidaeTanzania, 2016 January 28, not yet cataloged, 6000sh SS (Cap: *P. intermedius*)

Length: 6 inches, resident. The male (shown) is greenish-yellow above and yellow or chestnut below with a black head and yellow nape. The female is greenish above and white below with a pale yellow breast.

Habitat: Tall grass in damp areas near water.

Range: Mauritania to Kenya and Zambia.

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

**CHESTNUT-EARED BUNTING, *Emberiza fuscata*** Emberizidae

Japan, 2016 August 10, not yet cataloged, 82¥

Length: 6 inches, migratory. The male (shown) is brown above and pale below with a gray head, chestnut ears, black mustache and neck stripe, and rufous breast band. The female is paler with no black.

Habitat: Scrubby hillsides and open areas.

Range: Breeds from eastern Mongolia to Korea and Japan. Winters from Japan to the Himalayas and Myanmar.

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







# HERPETOLOGY

Associate Editor

Dick Roman, LM83

New Listings



[Ed. Note: Dick Roman has agreed to take over as Associate Editor for this column on an interim basis to see if he can fit the work into his very busy schedule. Let us hope that he can.]

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

Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
<b>AUSTRIA</b> <b>2016 January 18</b> (200th anniv. Austrian National Bank)				
2592	100c	Caduceus in stylized image from frieze over bank entrance		S C
<b>CENTRAL AFRICA</b> <b>2011 December 20</b> (WWF Endangered Animals) (SS/1) (s-o-s)				
1573	SS 2400fr	European Pond Turtle, <i>Emys orbicularis</i> (Slovenia Sc#247c)	Emydidae	A
<b>2011 December 27</b> (Philatelic Expo Jakarta 2012) (MS/4 & SS/1)				
1596	Margin	LL: Komodo Dragon, <i>Varanus komodoensis</i>	Varanidae, Platynota	Z
1619	SS 2700fr	Komodo Dragon, <i>Varanus komodoensis</i>	Varanidae, Platynota	A
<b>CHRISTMAS ISLAND</b> <b>2015 October 30</b> (Christmas) (Set/2, SS/2, & 2ea Bklt)				
539	65c	Stylized turtle in Santa cap (perf 14¾×14)		S
540	\$1.80	Stylized turtle forming snowman (perf 14¾×14)		S
540a		SS/2 (Sc#539–40)		
541	\$1.80	Stylized turtle forming snowman		S
541a		Bklt/5 (Sc#541) (die cut 11¼) (s/a)		
542	65c	Stylized turtle in Santa cap		S
542a		Bklt/5 (Sc#542) (die cut 11¼) (s/a) (foil application)		
<b>COOK ISLANDS</b> <b>2015 August 5</b> (50th anniv. Self-Government) (MS/10)				
1538b	50c	Hawksbill Sea Turtle, <i>Eretmochelys imbricata</i> (like Sc#1291a)	Cheloniidae	A
<b>FRENCH SOUTHERN &amp; ANTARCTIC TERR.</b> <b>2015 April 17</b> (60th anniv. F.S.A.T.)				
529a	80c	U/I sea turtle (with ship)		U B
<b>2015 October 4</b> (20th anniv. Ship <i>Marion Dufresne</i> )				
531	80c	Stylized turtle silhouette		S C
<b>2015 November 5</b> (20th anniv. Ship <i>Marion Dufresne</i> )				
532	€1.35	Stylized turtle silhouette		S C
<b>GAMBIA</b> <b>2014 December 31</b> (Snakes of Africa) (2ea MS/4 & 2ea SS/1)				
3628a	50d	Boomslang, <i>Dispholidus typus</i> (☠)	Colubridae, Colubrinae	A
3628b	50d	Gaboon Adder, <i>Bitis gabonica</i> (☠)	Viperidae, Viperinae	A
3628c	50d	King Cobra, <i>Ophiophagus hannah</i> (☠)	Elapidae	A
3628d	50d	Black Mamba, <i>Dendroaspis polylepis</i> (☠)	Elapidae	A
3629a	50d	Motuo Bamboo Pitviper, <i>Trimeresurus medoensis</i> (☠)	Viperidae, Crotalinae	A
3629b	50d	Montane Egg-eater, <i>Dasypeltis atra</i>	Colubridae, Colubrinae	A
3629c	50d	Puff Adder <i>Bitis arietans</i> (☠)	Viperidae, Viperinae	A
3629d	50d	Green Mamba, <i>Dendroaspis angusticeps</i> (☠)	Elapidae	A

**GAMBIA** (continued)

3630	SS 150d	African Cobra or Red Spitting Cobra, <i>Naja pallida</i> (♀)	Elapidae	A
3631	SS 150d	Cape Cobra, <i>Naja nivea</i> (♀)	Elapidae	A

**GHANA****2015 March 2** (Snakes) (2ea MS/4 & 2ea SS/1)

2828a	4ce	Blotched Snake, <i>Elaphe sauromates</i>	Colubridae	A
2828b	4ce	Caspian Whipsnake, <i>Dolichophis caspius</i>	Colubridae, Colubrinae	A
2828c	4ce	European Grass Snake, <i>Natrix natrix</i>	Colubridae, Natricinae	A
2828d	4ce	Long-nosed Viper, <i>Vipera ammodytes</i> (not in Ghana) (♀)	Viperidae	
	Margin	Bot: European Grass Snake, <i>Natrix natrix</i>	Colubridae, Natricinae	Z
2829a	4ce	Smooth Snake, <i>Coronella austriaca</i> (not in Ghana)	Colubridae, Colubrinae	A
2829b	4ce	Mangrove Snake, <i>Boiga dendrophila</i> (♀)	Colubridae	A
2829c	4ce	Corn Snake, <i>Pantherophis guttatus</i>	Colubridae	A
2829d	4ce	Common Garter Snake, <i>Thamnophis sirtalis</i>	Colubridae	A
	Margin	Top & Bot: U/I snake		U Z
2830	SS 9ce	Aesculapian Snake, <i>Zamenis longissimus</i> (also in margin)	Colubridae	A
2831	SS 9ce	Royal Python, <i>Python regius</i> (also in margin)	Pythonidae	A

**GRENADA GRENADINES****2015 May 18** (Qi Baishi Art) (MS/6, MS/4, & SS/1)

2916a	\$3.15	Stylized Frog		S
2917b	\$3.25	Stylized Frogs		S
2918	SS \$10	Stylized Frog and tadpoles		S

**GUATEMALA****2015 September 25** (Coral Reef Marine Life) (Set/4 & SS/4)

715	10q	Green Sea Turtle, <i>Chelonia mydas</i>	Cheloniidae	A
715a		SS/4 (Sc#712–15)		

**HONG KONG****2015 July 16** (Chinese and Foreign Folklore) (Set/6, SS/6, MS/6)

1737	\$1.70	Tortoise and the Hare		S
1741a		SS/6 (Sc#1736–41) (granite paper) (perf 13¾)		
1742b	\$1.70	Tortoise and the Hare		S
1742		MS/6 (Sc#1742a–f) (die cut 13¾) (s/a)		

**ISRAEL****2016 February 9** (Sea Turtles) (Block/4) (also available with tabs)

2096a	2.30s	Green Sea Turtle, <i>Chelonia mydas</i>	Cheloniidae	A
2096b	2.30s	Loggerhead Sea Turtle, <i>Caretta caretta</i>	Cheloniidae	A
2096c	2.30s	Hawksbill Sea Turtle, <i>Eretmochelys imbricata</i>	Cheloniidae	A
2096d	2.30s	Leatherback Sea Turtle, <i>Dermochelys coriacea</i> (hatchling)	Cheloniidae	A

**ITALY****2015 July 25** (Botanical Gardens) (Set/4)

3326	95c	U/I sea turtle (Asinara National Park)		U C
------	-----	----------------------------------------	--	-----

**JAPAN****2015 June 2** (60th anniv. Tokushima Local Autonomy Law) (MS/5)

3828e	82¥	U/I sea turtle on Ohama Beach		U
-------	-----	-------------------------------	--	---

**2015 July 23** (Letter Writing Day) (Bklt/10)

3854	82¥	Stylized turtle (with cranes & flowers)		S C
3859a		Bklt/10 (Sc#3850–59)		

**2015 September 4** (Greetings) (MS/10)

3923b	52¥	Stylized turtle (with crane)		S B
-------	-----	------------------------------	--	-----

**2015 November 6** (Disney Characters) (MS/10)

3960h	82¥	Stylized lizard (with Rapunzel & flowers)		S C
-------	-----	-------------------------------------------	--	-----

**KOREA (South)****2014 September 16** (Biological Diversity Conference, Pyeongchang)

2431	300w	Stylized frog (with elephant & dolphins)		S C
------	------	------------------------------------------	--	-----



<b>MACAO</b>		<b>2015 May 5</b> (Wetlands Wildlife) (Block or Strip/4)		
1441c	4.50p	Ornate Narrow-mouthed Toad, <i>Microhyla ornata</i>	Microhylidae, Microhylinae	A
<b>MALAGASY REPUBLIC</b>		<b>2014 October 9</b> (Green Sea Turtle) (Joint Issue)		
This stamp is part of a joint issue with Comoro Islands, France, French Southern & Antarctic Territories, Mauritius, and Seychelles. All stamps have the same common design and were issued on a SS of six.				
1637	1500a	Green Sea Turtle, <i>Chelonia mydas</i>	Cheloniidae	A
<b>MARSHALL ISLANDS</b>		<b>2016 March 3</b> (Wildlife) (MS/10)		
1133e	49c	Leatherback Sea Turtle, <i>Dermochelys coriacea</i>	Cheloniidae	A
1133g	49c	Hawksbill Sea Turtle, <i>Eretmochelys imbricata</i>	Cheloniidae	A
<b>MEXICO</b>		<b>2015 October 28</b> (Mexican Constitution) (Horiz pair)		
2858	7p	Stylized snake on Mexican Coat of Arms (1823 Constitution plan)		S C
2859	7p	Stylized snake on Mexican Coat of Arms (1824 Constitution)		S C
		<b>2015 November 19</b> (Philately and Postal Culture)		
2963	13.50p	Stylized snake on Mexican Coat of Arms seal		S C
<b>MICRONESIA</b>		<b>2015 April 1</b> (Marine Life) (Set/5)		
1149	5c	Green Sea Turtle, <i>Chelonia mydas</i>	Cheloniidae	A
<b>MONACO</b>		<b>2016 April 1</b> (Lifecycle of <i>Caretta caretta</i> ) (MS/4)		
2841a	80c	Loggerhead Sea Turtle, <i>Caretta caretta</i> (juvenile at sea)	Cheloniidae	A
2841b	80c	Same species (adult at sea)		A
2841c	80c	Same species (hatchlings leaving shell)		A
2841d	80c	Same species (female laying eggs)		A
<b>MONGOLIA</b>		<b>2015 December 14</b> (Dashichoiling Monastery) (Set/4 & SS/2)		
2839	1000t	Stylized snake in mouth of oriental dragon character (Khuree Tsam ritual)		S
2840	SS 1300t	Same image reversed in LL margin (Maidar goddess)		S Z
<b>MONTSERRAT</b>		<b>2015 March 24</b> (Leatherback Sea Turtle) (MS/4 & SS/1)		
1359a	\$3.25	Leatherback Sea Turtle, <i>Dermochelys coriacea</i> (in sea)	Cheloniidae	A
1359b	\$3.25	Same species (head of hatchling)		A
1359c	\$3.25	Same species (heading to sea)		A
1359d	\$3.25	Same species (returning to beach)		A
1360	SS \$7.00	Leatherback Sea Turtle, <i>Dermochelys coriacea</i> (hatchling)	Cheloniidae	A
<b>NETHERLANDS</b>		<b>2015 April 28</b> (Flora & Fauna) (MS/10 & Bklt/2)		
1494f	(69c)	European Grass Snake, <i>Natrix natrix</i> (perf 13¼×12¾)	Colubridae, Natricinae	A
1494p	(69c)	European Grass Snake, <i>Natrix natrix</i>	Colubridae, Natricinae	A
1494w		Bklt/2 (Sc#1494o–p) (perf 14½×14¼)		
<b>NEVIS</b>		<b>2015 March 24</b> (Loggerhead Sea Turtle photos) (MS/6 & SS/1)		
1867a	\$3.15	Loggerhead Sea Turtle, <i>Caretta caretta</i> (head facing left)	Cheloniidae	A
1867b	\$3.15	Same species (facing front)		A
1867c	\$3.15	Same species (left flipper up)		A
1867d	\$3.15	Same species (head facing right)		A
1867e	\$3.15	Same species (swimming left)		A
1867f	\$3.15	Same species (from below)		A
	Margin	LR: Loggerhead Sea Turtle, <i>Caretta caretta</i> (three hatchlings)	Cheloniidae	Z
1868	SS \$10	Loggerhead Sea Turtle, <i>Caretta caretta</i>	Cheloniidae	A
	Margin	UL: Loggerhead Sea Turtle, <i>Caretta caretta</i> (hatchling)	Cheloniidae	Z

**NEW CALEDONIA****2015 November 5** (New Caledonian Sea Turtles) (MS/4)

1203a	110fr	Hawksbill Sea Turtle, <i>Eretmochelys imbricata</i>	Cheloniidae	A
1203b	110fr	Loggerhead Sea Turtle, <i>Caretta caretta</i>	Cheloniidae	A
1203c	110fr	Green Sea Turtle, <i>Chelonia mydas</i>	Cheloniidae	A
1203d	110fr	Leatherback Sea Turtle, <i>Dermochelys coriacea</i>	Cheloniidae	A
1203	Margin	UL: Green Sea Turtle, <i>Chelonia mydas</i>	Cheloniidae	Z

**NIGER****2013 September 30** (Reptiles of Niger) (MS/4 & SS/1)

1284a	750fr	Ball Python or Royal Python, <i>Python regius</i>	Pythonidae, Henophidia	A
1284b	750fr	Nile Crocodile, <i>Crocodylus niloticus</i>	Crocodylidae	A
1284c	750fr	Desert Monitor, <i>Varanus griseus</i>	Varanidae	A
1284d	750fr	Nile Soft-shelled Turtle, <i>Trionyx triunguis</i>	Trionychidae	A
1309	SS 2500fr	African Spurred Tortoise, <i>Geochelone sulcata</i>	Testudinidae	A

**2013 December 20** (Turtles) (MS/4 & SS/1)

1333a	750fr	African Spurred Tortoise, <i>Geochelone sulcata</i>	Testudinidae	A
1333b	750fr	Yellow-footed Tortoise, <i>Chelonoidis denticulata</i>	Testudinidae	A
1333c	750fr	Charles Island Giant Tortoise, <i>Chelonoidis nigra</i>	Testudinidae	A
1333d	750fr	Yellowbelly Slider, <i>Trachemys scripta</i> ssp. <i>elegans</i>	Emydidae, Deirochelyinae	A
1333	Margin	Top: Green Sea Turtle, <i>Chelonia mydas</i>	Cheloniidae	Z
1356	SS 2500fr	Green Sea Turtle, <i>Chelonia mydas</i>	Cheloniidae	A

**2013 December 20** (Endangered Animals) (MS/4)

1335a	750fr	Hawksbill Sea Turtle, <i>Eretmochelys imbricata</i>	Cheloniidae	A
-------	-------	-----------------------------------------------------	-------------	---

**PALAU****2015 December 31** (Coral Reef Snakes) (MS/6 & SS/1)

1301a	65c	Turtle-headed Sea Snake, <i>Emydocephalus annulatus</i> (name top)	Elapidae, Hydrophiinae	A
1301b	65c	Same species (name at bottom)		A
1301c	65c	Colubrine Sea Krait, <i>Laticauda colubrina</i> (body to right) (♀)	Elapidae, Laticaudinae	A
1301d	65c	Same species (body to left)		A
1301e	65c	Same species with orange rock)		A
1301f	65c	Same species (with coral)		A
1302	SS \$4	Colubrine Sea Krait, <i>Laticauda colubrina</i> (head only) (♀)	Elapidae, Laticaudinae	A

**PALESTINIAN AUTHORITY****2013 June 3** (Flora & Fauna) (Set/6)

221	720f	U/I Turtle		U A
-----	------	------------	--	-----

**PHILIPPINES****2015 February 6** (Centenary Univ. of Philippines College of Dentistry)

3587	10p	Stylized snake on Rod of Asclepius		S B
------	-----	------------------------------------	--	-----

**2015 November 11** (Wildlife) (MS/4)

3634b	15p	Philippine Sailfin Lizard, <i>Hydrosaurus pustulatus</i>	Agamidae, Hydrosaurinae	A
-------	-----	----------------------------------------------------------	-------------------------	---

**PORTUGAL****2015 October 28** (500th anniv. Portuguese Arrival Timor) (Set/2, SS/1)

3760	80c	Stylized lizard silhouette		S
3761	€1	Stylized lizard silhouette		S
3762	SS €2.50	Stylized lizard silhouette		S

**ST. KITTS****2015 March 24** (Marine Life of Taiwan) (MS/6)

906f	\$3.15	Hawksbill Sea Turtle, <i>Eretmochelys imbricata</i>	Cheloniidae	A
------	--------	-----------------------------------------------------	-------------	---

**ST. MARTIN****2015 July 1** (Tourism) (MS/10)

69f	180c	Common Green Iguana, <i>Iguana iguana</i>	Iguanidae, Iguania	A
69		MS/10 (Sc#68c-f & Sc#69a-f)		

**ST. PIERRE & MIQUELON****2015 October 7** (Flora & Fauna) (Single)

1018	76c	Bronze Frog or Green Frog, <i>Rana clamitans</i>	Ranidae	A
------	-----	--------------------------------------------------	---------	---

**ST. THOMAS & PRINCE ISLANDS 2014 March 25** (2ea SS/1)

2660 SS 96000d According to Scott, but no identifiable image found. Stamp features Forth Road Bridge

2668 SS 96000d LL: Blue Iguana, *Cyclura lewisii* Iguanidae Z**2014 August 8** (Turtles) (MS/4 & SS/1)2678a 25000d Spotted Turtle, *Clemmys guttata* Emydidae A2678b 25000d Alligator Snapping Turtle, *Macrochelys temminckii* Chelydridae A2678c 25000d Spiny Softshell, *Apalone spinifera* Trionychidae A2678d 25000d African Spurred Tortoise, *Centrochelys sulcata* Testudinidae A2696 SS 96000d Hawksbill Sea Turtle, *Eretmochelys imbricata* Cheloniidae A**2014 August 8** (WWF s-o-s) (MS/4)2689c 25000d Komodo Dragon, *Varanus komodoensis* (Indonesia Sc#1911) Varanidae, Platynota B2689d 25000d African Rock Python, *Python sebae* (Benin Sc#1086c) Pythonidae B**SAMOA 2015 March 16** (Endangered Marine Life) (Horiz strip/3 + 3 labels)1206b \$13.50 Green Sea Turtle, *Chelonia mydas* Cheloniidae A**SLOVAKIA 2015 October 9** (Nature Protection) (SS/2 + 5 labels)723 Label Top: European Tree Frog, *Hyla arborea* Hylidae, Hylinae ZMid: Fire Salamander, *Salamandra salamandra* Salamandridae Z**SOUTH AFRICA 2015 March 3** (Endangered Animals) (MS/6)1542e (3r) Giant Girdled Lizard or Sungazer, *Smaug giganteus* Cordylidae A**2015 September 7** (14th World Forestry Congress, Durban) (MS/5)

1548d (8r) U/I lizard (on tree branch with indigenous animals) U B

**SPAIN 2015 July 21** (Protected Animals) (Block/4)4060b 55c Leatherback Sea Turtle, *Dermochelys coriacea* Cheloniidae A**SURINAM 2014 November 24** (40th anniv. Van Reijen Philatelic Agent) (SS/2)

1490a \$4 According to Scott, but no identifiable image found (s-o-s) U

1490b \$6 According to Scott, but no identifiable image found (s-o-s) U

**TONGA 2015 November 23** (Queen Elizabeth II) (MS/4)

The photo on this stamp shows Queen Elizabeth with her husband Prince Phillip and Tongan Queen Salote Tupou III during a tour in December 1953, looking at a tortoise allegedly given to the royal family of Tonga by Captain James Cook. Named Tu'i Malila, it supposedly hatched in 1777. It died May 1965 and is preserved in a museum.

1282d 2pa Radiated Tortoise, *Geochelone radiata* Testudinidae C**2016 January 14** (2nd Summit of the IPIC Forum) (Set/4 & SS/4)1286 5pa Indian Cobra, *Naja naja* (♀) Elapidae A

1287a SS/4 (Sc#1284–87)

**TURKEY 2015 July 9** (Kazdagi National Park) (SS/1)

3450 1.25L Two U/I lizards U B

**URUGUAY 2015 June 5** (Wetlands Fauna) (MS/10)2514h 15p Brazilian Green Racer, *Philodryas aestiva* Colubridae A2514j 15p No common name, *Melanophryniscus montevidensis* Bufonidae A**UZBEKISTAN 2015 June 15** (Surcharges) (Set/7)769 200s Central Asian Cobra, *Naja oxiana* (Sc#8 surch) (♀) Elapidae A771 200s Common Wonden Gecko, *Teratoscincus scincus* (Sc#7 surch) Gekkonidae A775 200s Desert Monitor, *Varanus griseus* (Sc#13 surch) Varanidae A**ZIMBABWE 2015 September 29** (Handicrafts) (Set/4)

1214 \$1.00 Stylized turtle (metal sculpture) S B



# MARINE INVERTEBRATES

Editor

Ian Hunter, BU1619

New Listings



Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
<b>GUATEMALA</b> <b>2015 February 5</b> (Coral Reef Marine Life) (Set/4 & SS/4)				
712	50c	Spiny Lobster, <i>Panulirus argus</i>	Palinuridae	A
715a		SS/4 (Sc#712–15)		
<b>KAZAKHSTAN</b> <b>2015 November 7</b> (Year of the Sheep) (SS/1)				
760	Margin	L: U/I Snail		U Z
<b>KOREA (South)</b> <b>2015 February 27</b> (Constellations) (MS/16 + 5 labels)				
24381	300w	Stylized Cancer the Crab as Constellation		S
<b>KOREA (North)</b> <b>2014 May 11</b> (Fish & Shellfish) (Set/4 & Bklt/4)				
5276	50w	a Freshwater Clam, <i>Anodonta calyptigos</i>	Unionidae	B
5277	70w	Bittersweet Clam, <i>Glycymeris albolineata</i>	Glycymerididae	B
5278	90w	Pen Shell, <i>Atrina pectinata</i> ssp. <i>japonica</i>	Pinnidae	B
5279	110w	Black Lip Pearl Oyster, <i>Pinctada margaritifera</i>	Pteriidae	B
5279a		Bklt/4 (Sc#5276–79)		
<b>MACAO</b> <b>2015 May 5</b> (Wetlands Wildlife) (Block or Strip/4)				
1441a	2p	Fiddler Crab, <i>Uca arcuata</i>	Ocypodidae	A
<b>MALAYSIA</b> <b>2015 June 8</b> (Marine Life) (Set/4)				
1550	60c	Floating Bell Jellyfish, <i>Phyllorhiza punctata</i>	Mastigiidae	A
1551	60c	a Dorid Nudibranch, <i>Hypselodoris bullocki</i>	Chromodorididae	A
1552	\$1.20	Coral Crab, <i>Trapezia areolata</i>	Trapeziidae	A
1553	\$1.20	Harlequin Shrimp, <i>Hymenocera picta</i>	Hymenoceridae	A
<b>2015 July 29</b> (Pearls) (Set/3 & SS/1)				
1558	60c	Pearl Oyster, <i>Pinctada maxima</i>	Pteriidae	A
1559	70c	Same species		A
1560	80c	Same species		A
1561	SS \$5	<i>Pinctada maxima</i> , Pearl Oyster	Pteriidae	A
<b>MARSHALL ISLANDS</b> <b>2015 March 3</b> (Marine Life) (MS/15) (new data)				
1113a	49c	U/I Starfish		U B
<b>MICRONESIA</b> <b>2014 December 31</b> (Coral Reefs) (2ea MS/4 & 2ea SS/1)				
1131a	\$1	U/I Coral		U A
1131b	\$1	U/I Coral		U A
1131c	\$1	U/I Coral		U A
1131d	\$1	U/I Coral		U A
1132a	\$1	U/I Coral		U A
1132b	\$1	U/I Coral		U A
1132c	\$1	U/I Coral		U A
1132d	\$1	U/I Coral		U A
1133	SS \$3.50	U/I Coral		U A
1134	SS \$3.50	U/I Coral		U A



<b>MICRONESIA</b> (continued)		<b>2015 April 1</b> (Marine Life) (Set/5)		
1147	2c	Yellow Finger Sponge, <i>Callyspongia ramosa</i>	Callyspongiidae	A
1150	10c	Box Jellyfish, <i>Chironex fleckeri</i> (♀)	Chirodropidae	A
<b>NEW ZEALAND</b>		<b>2015 May 6</b> (Shells) (Set/5 & SS/5)		
2586	80c	Silver Paua, <i>Haliotis australis</i> (perf 14)	Haliotidae	A
2586a	80c	Same species (perf 13¼×13½)		A
2587	\$1.40	Scott's Murex, <i>Rolandiella scotti</i> (perf 14)	Muricidae	A
2587a	\$1.40	Same species (perf 13¼×13½)		A
2588	\$2	Golden Volute, <i>Provocator mirabilis</i> (perf 14)	Volutidae	A
2588a	\$2	Same species (perf 13¼×13½)		A
2589	\$2.50	Fan Shell, <i>Talochlamys gemmulata</i> (perf 14)	Pectinidae	A
2589a	\$2.50	Same species (perf 13¼×13½)		A
2590	\$3	Opal Top Shell, <i>Cantharidus opalus</i> (perf 14)	Trochidae	A
2590a	\$3	Same species (perf 13¼×13½)		A
2590b		SS/5 (Sc#2586a–90a)		
		<b>2015 July 1</b> (Popular New Zealand Foods) (MS/18)		
2593d	80c	Stylized Bluff Oyster		S
2593g	80c	Stylized Shrimp cocktail		S
<b>PALAU</b>		<b>2014 December 1</b> (Lagoon Jellyfish–WWF) (2ea Block or Horiz strip/4)		
1256a	40c	Lagoon Jellyfish, <i>Mastigias papua</i> (near surface)	Mastigiidae	A
1256b	40c	Same species (two jellyfish)		A
1256c	40c	Same species (above sea floor)		A
1256d	40c	Same species (in sea cave)		A
1257a	90c	Lagoon Jellyfish, <i>Mastigias papua</i> (near surface)	Mastigiidae	A
1257b	90c	Same species (two jellyfish)		A
1257c	90c	Same species (above sea floor)		A
1257d	90c	Same species (in sea cave)		A
		<b>2015 December 31</b> (Mollusks) (MS/4 & SS/1)		
1299a	\$1.20	Palau Nautilus, <i>Nautilus belauensis</i> (shell on right)	Nautilidae	A
1299b	\$1.20	Chambered Nautilus, <i>Nautilus pompilius</i> (shell on right)	Nautilidae	A
1299c	\$1.20	Palau Nautilus, <i>Nautilus belauensis</i> (shell on left)	Nautilidae	A
1299d	\$1.20	Chambered Nautilus, <i>Nautilus pompilius</i> (shell on left)	Nautilidae	A
1299	Margin	Bot: U/I Coral sp.		U Z
1300	SS \$4	Palau Nautilus, <i>Nautilus belauensis</i>	Nautilidae	A
	Margin	R: Same species		Z
		Bot: U/I Coral sp.		U Z
<b>PORTUGAL</b>		<b>2015 July 29</b> (Mediterranean Diet) (SS/1)		
3724	€1.80	Cooked Octopus on plate		G
<b>ST. KITTS</b>		<b>2015 March 24</b> (Marine Life of Taiwan) (MS/6 & SS/2)		
906b	\$3.15	White Margin Sea Slug, <i>Glossodoris rufomarginata</i>	Chromodorididae	A
906e	\$3.15	Huang Ze Gray Crab, <i>Geothelphusa albogilva</i>	Potamidae	A
907a	SS \$5	Peacock Mantis Shrimp, <i>Odontodactylus scyllarus</i> (head)	Odontodactylidae	A
907b	SS \$5	Peacock Mantis Shrimp, <i>Odontodactylus scyllarus</i> (body)	Odontodactylidae	A
<b>SERBIA</b>		<b>2014 October 8</b> (Scientists) (Set/2)		
675	23d	Fossil shell, <i>Lymnocardium</i> sp. (with Petar Stevanovic)	Cardiidae	B

**SOUTH AFRICA****2015 August 12** (Jellyfish) (MS/10)

1547a	(6.55r)	Barrel Jellyfish, <i>Rhizostoma</i> sp.	Rhizostomatidae	A
1547b	(6.55r)	St. Lucia Jellyfish, <i>Crambionella stuhlmanni</i> (♀) (UR margin)	Catostylidae	A
1547c	(6.55r)	Box Jellyfish, <i>Carybdea branchi</i> (♀) (also L & UL margin)	Carybdeidae	A
1547d	(6.55r)	Mauve Stinger, <i>Pelagia noctiluca</i> (♀)	Pelagiidae	A
1547e	(6.55r)	Purple Compass Jellyfish, <i>Chrysaora africana</i>	Pelagiidae	A
1547f	(6.55r)	Cape Barrel Jellyfish, <i>Eupilema inexpectata</i>	Rhizostomatidae	A
1547g	(6.55r)	Benguela Compass Jellyfish, <i>Chrysaora fulgida</i>	Pelagiidae	A
1547h	(6.55r)	Box Jellyfish, <i>Chiropsopus gorilla</i> (♀)	Chiropsopidae	A
1547i	(6.55r)	Pink Meanie, <i>Drymonema</i> sp.	Drymonematidae	A
1547j	(6.55r)	Helmet Jellyfish, <i>Periphylla periphylla</i>	Periphyllidae	A
Margin	LL, Bot, & R:	Various U/I Coral sp.		U Z

**SWEDEN****2016 March 17** (International Foods) (Vert strip/5 & Bklt/10)

2772a	(7k)	Stylized Clam (Italian food with spaghetti, olives, mushroom, cheese, tomato)		S B
2772f		Bklt/10 (2ea Sc#2772a–e)		

**2016 May 4** (Beach Vacation Items) (Vert strip/5 & Bklt/10)

2777b	(7k)	Stylized Shell & Starfish (with beach hat & phone with earbuds)		S B
2777c	(7k)	Stylized Crab (with suntan lotion & snorkel)		S B
2777d	(7k)	Stylized Shells (with beach ball, sunglasses, pail, juice box)		S B
2777e	(7k)	Stylized Mussels (with seaweed, shovel, picnic basket, thermos, apple)		S B
2777f		Bklt/10 (2ea Sc#2777a–e)		

**THAILAND****2015 June 8** (Marine Life) (Set/4 & SS/4)

2857	3b	Harlequin Shrimp, <i>Hymenocera picta</i>	Hymenoceridae	A
2858	3b	a Guard Crab, <i>Trapezia areolata</i>	Trapeziidae	A
2859	3b	a Dorid Nudibranch, <i>Hypselodoris bullocki</i>	Chromodorididae	A
2860	3b	White-spotted Jellyfish, <i>Phyllorhiza punctata</i>	Mastigiidae	A
2860a		SS/4 (Sc#2857–60)		

**TONGA****2015 April 1** (WWF Seahorses Surch & Ovpt)

1262	90s	U/I Sea fan (with seahorse) (Sc#1175 surch & ovpt)		U B
------	-----	----------------------------------------------------	--	-----

**CHAIN CORAL**

At right is an image of a piece of Chain Coral (*Halysites* sp.) found by a relative of one of my former classmates recently along the shore of Lake Michigan. This is an extinct genus of tabulate coral that lived from the Ordovician to the Silurian period (449.5 to 412.3 Ma).

The coral gets its name from the manner of growth. The genus is colonial and individual members of the colony construct an elliptical tube next to each other in the manner of chain links.

Most specimens seem to be only one to a few centimeters in diameter. This one is relatively large—a bit bigger than a baseball.





# ENTOMOLOGY

Editor

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



## New Listings

Scott#	Denom	Common Name/Scientific Name	Family/Subfamily	Code
<b>ARMENIA</b> <b>2016</b> (Flora & Fauna) (Set/4 & MS/8 + label)				
	500d	Marbled White, <i>Melanargia galathea</i> L.	NYM, Satyrinae	A
	Margin	LL, UR, & tab: Same species (miniature size) (with flower, bird & hedgehog)		Z
<b>ARUBA</b> <b>2016 April 29</b> (Butterflies) (Set/8) (Correction)				
	90c	Old World Swallowtail, <i>Papilio machaon</i> L. (Cap: <i>P. glaucus</i> )	PAP, Papilioninae	A
<b>AUSTRALIA</b> <b>2016 May</b> (Additional Data) (Set/4 & MS/4)				
At WSS-NY 2016, Australia Post issued a different SS containing each of the four stamps on all eight days of the show. Each sheet indicates the day of issue. Some have one or more stamps printed with a special embellishment.				
	\$1	Great Jay, Pale Green Triangle, <i>Graphium eurypylus</i> L.	PAP, Papilioninae	A
	\$1	Australian or Bordered Rustic, <i>Cupha prosope</i> Fabr.	NYM, Heliconiinae	A
	\$1	Cairns Birdwing, <i>Troides priamus euphorion</i> Gray	PAP, Papilioninae	A
	\$2.75	Checkered Swallowtail, <i>Papilio demoleus</i> L.	PAP, Papilioninae	A
	Day 1	SS/4 perf. Margin shows <i>C. prosope</i> with MS extended to UL to show the wing.		A
	Day 2	SS/4. <i>T. p. euphorion</i> with holographic foil on wings. Same species in R margin.		A
	Day 3	SS/4. <i>P. demoleus</i> with laser cut-outs of wing pattern. Same species in R margin.		A
	Day 4	SS/4. <i>C. prosope</i> with wing veins embossed. Same species in R margin.		A
	Day 5	SS/4 imperf. <i>G. eurypylus</i> with pearl foil wings. Same species in R margin.		A
	Day 6	SS/4. Combined embellishment on each stamp. Each species in R margin.		A
	Day 7	SS/4. Like Day 1 with Day 7 show cancel in black		A
	Day 8	SS/4. Like Day 1 with Day 8 show cancel in red		A
<b>BOSNIA &amp; HERZEGOVINA</b> <b>2016 May 25</b> (Butterflies) (MS/2)				
a	2.50m	Large Heath or Common Ringlet, <i>Coenonympha tullia</i> Müller	NYM, Satyrinae	A
b	2.50m	Eastern Short-Tailed Blue, <i>Cupido decoloratus</i> Staudinger	LYC, Polyommatainae	A
<b>CHINA (Taiwan)</b> <b>2016</b> (PhilaTaipei 2016)				
	\$12	Stylized butterfly	Lycaenidae	S B
<b>FRANCE</b> <b>2016 May 20</b> (Solitary Bees) (MS/4)				
a	70c	Builder Bee, <i>Osmia cornuta</i> L.	MEGA, Megachilinae	A
b	70c	<i>Colletes</i> sp.	Colletidae, Colletinae	A
c	70c	<i>Anthophora</i> sp.	API, Apinae	A
d	70c	<i>Megachile pyrenaica</i> Lepeletier	MEGA, Megachilinae	A
<b>GERMANY</b> <b>2016 June 2</b> (Micro-Worlds)*				
	70c	Small Emperor Moth, <i>Saturnia pavonia</i> L. (magnified antenna)	SAT, Saturniinae	A
<b>GREAT BRITAIN (Guernsey)</b> <b>2016 July 16</b> (Postcrossing) (Set/2)				
	(70p)	LL: <i>Polyommatus</i> sp.	LYC, Polyommatainae	B
		Ctr: Western Honeybee, <i>Apis mellifera</i> L.	API, Apinae	B
<b>ICELAND</b> <b>2016 April 28</b> (Four Seasons) (Set/4)				
	(180k)	Summer: Five stylized butterfly silhouettes	Nymphalidae	S

<b>ISRAEL</b>		<b>2016 April 19</b> (Seasons in Israel – Spring) (Single)		
4.10s	Four stylized butterflies (with children) (also on tab)	Lepidoptera	S	
<b>MAURITIUS</b>		<b>2016 June 6</b> (Freshwater Fauna) (Set/4)		
10r	<i>Laccotrephes annulipes</i> LaPorte	Nepidae, Nepinae	A	
<b>MOLDOVA</b>		<b>2016 April 15</b> (Wild Flowers) (MS/6 + 3 labels)		
a	10b Plain Tiger, <i>Danaus chrysippus</i> L.	NYM, Danainae	B	
b	25b Western Honeybee, <i>Apis mellifera</i> L.	API, Apinae	B	
c	1L Monarch, <i>Danaus plexippus</i> L.	NYM, Danainae	B	
e	3L U/I Dragonfly	Libellulidae	U B	
f,	5L European Mantis, <i>Mantis religiosa</i> L.	MAN, Mantinae	B	
Margin	UL: U/I Dragonfly	Libellulidae	U Z	
	LL: Western Honeybee, <i>Apis mellifera</i> L.	API, Apinae	Z	
	Bot: Bumblebee, <i>Bombus</i> sp.	API, Apinae	Z	
	LR: U/I Butterfly	Nymphalidae	U Z	
	L label: 7-Spotted Ladybird, <i>Coccinella septempunctata</i> L.	COC, Coccinellinae	Z	
	Ctr label: Old World Swallowtail, <i>Papilio machaon</i> L.	PAP, Papilioninae	Z	
<b>NIGER</b>		<b>2013 September 30</b> (Flowers & Honeybees) (MS/4 & SS/1)		
1282a	750fr Western Honeybee, <i>Apis mellifera</i> L. ( <i>Chaenomeles japonica</i> )	API, Apinae	B	
1282b	750fr Same species (with <i>Tanacetum parthenium</i> )		B	
1282c	750fr Same species (with <i>Paeonia cambessedesii</i> )		B	
1282d	750fr Same species (with <i>Odontoglossum rossi</i> )		B	
1307	SS 2500fr Western Honeybee, <i>Apis mellifera</i> L. (also UR & LR margin)	API, Apinae	B	
		<b>2013 September 30</b> (Fight Against Malaria) (Set/4 & SS/1)		
1285a	750fr <i>Anopheles gambiae</i> Giles (silhouette) (medic feeling head)	CUL, Anophelinae	S B	
1285b	750fr <i>Anopheles gambiae</i> Giles (silhouette) (using bed nets-on R)	CUL, Anophelinae	S B	
1285c	750fr <i>Anopheles gambiae</i> Giles (silhouette) (using bed nets-on L)	CUL, Anophelinae	S B	
1285d	750fr <i>Anopheles gambiae</i> Giles (silhouette) (medic wearing gloves)	CUL, Anophelinae	S B	
1310	Margin Bot: <i>Anopheles gambiae</i> Giles	CUL, Anophelinae	S Z	
		<b>2013 September 30</b> (Rotary International) (MS/4 & SS/1)		
1300a	875fr Wandering Donkey Acraea, <i>Acraea neobule</i> Doubleday	NYM, Heliconiinae	B	
1300c	875fr Mimic, <i>Hypolimnas misippus</i> L.	NYM, Nymphalinae	B	
1300d	875fr Scarlet/Red/Crimson Tip, <i>Colotis danae</i> Fabr.	PIE, Pierinae	B	
1325	SS 3000fr Foxy Charaxes or 2-Tailed Pasha, <i>Charaxes jasius</i> L.	NYM, Charaxinae	B	
Margin	LL: Striped Policeman, <i>Coeliades forestan</i> Stoll	HES, Coeliadinae	Z	
<b>QATAR</b>		<b>2013 June 23</b> (Jeemtv.net) (MS/4)		
1088d	2.50r Stylized Butterflies (with girl)	Lepidoptera	S B	
<b>ST. MARTIN</b>		<b>2016 January 2</b> (Butterflies) (4ea SS/1) (Additional Data)		
SS 500c	King Shoemaker, <i>Archaeoprepona demophon</i> L.	NYM, Charaxinae	A	
Margin	UL & LL: U/I Caterpillars		U Z	
	ML: Small Emperor Moth, <i>Saturnia pavonia</i> L.	SAT, Saturniinae	Z	
	Bot, UR, & LR: U/I Butterflies		U Z	
SS 500c	Sky Blue Morpho, <i>Morpho portis</i> Hübner	NYM, Morphinae	A	
Margin	ML, LL, Bot, MR, & LR: U/I Butterflies		U Z	
	LL: U/I Caterpillar		U Z	
SS 500c	<i>Arawacus lincoides</i> Draudt	LYC, Theclinae	A	
Margin	UL & LR: U/I Caterpillars		U Z	
	Top: <i>Morpho</i> sp.	NYM, Morphinae	Z	
	MR: U/I Moth		U Z	



**ST. MARTIN** (continued)

SS 500c	<i>Nymphidium mantus</i> Cramer	RIO, Riordininae	A
Margin	UL, UR, & LR: U/I Caterpillars		U Z
	Top: U/I Butterfly		U Z
	MR: Small Emperor Moth, <i>Saturnia pavonia</i> L.	SAT, Saturniinae	Z
	LR: U/I Moth		U Z

**SERBIA****2016 March 16** (WWF) (Horiz strip/4 + central label) (New Data)

737a	23d	Southern Festoon, <i>Zerynthia polyxena</i> Denis & Schiffermüller	PAP, Parnassiinae	A
737b	46d	Same species		A
737c	50d	Same species (with larva)		A
737d	70d	Same species		A

MS/20 + 5 labels (same species adult on one label, larva on second label)

**SWITZERLAND****2016 May 12** (Nocturnal Animals) (Set/4)

1603	150c	Common Glowworm, <i>Lampyrus noctiluca</i> L. ♀	LAM, Lampyrinae	A
------	------	-------------------------------------------------	-----------------	---

**TAJIKISTAN****2014 October 3** (Mushrooms)

429	1.60s	U/I Butterfly (with mushroom)	Nymphalidae	U B
		U/I Ladybug (with mushroom)	Coccinellidae	U B
430	2s	U/I Butterfly (with mushroom)		U B

**TONGA****2016 January 4** (Butterflies) (Set/2, SS/2, 2ea SS/1)

This set of stamps and the set for Niuafo'ou, below, both catalog for a total of \$300. Add \$350 for earlier values of these sets. The Tongan government justifies the high values as necessary for air freight shipped among the islands.

CE11	83pa	Common Lime Butterfly, <i>Papilio demoleus</i> L.	PAP, Papilioninae	A
CE12	89pa	Old World Swallowtail, <i>Papilio machaon</i> L.	PAP, Papilioninae	A
CE12a		SS/2 (Sc#CE11–12) (with white frames)		
CE17	SS 83pa	Common Lime Butterfly, <i>Papilio demoleus</i> L. (w/o frames)	PAP, Papilioninae	A
CE18	SS 89pa	Old World Swallowtail, <i>Papilio machaon</i> L. (w/o frames)	PAP, Papilioninae	A

**TONGA (Niuafo'ou)****2016 January 4** (Butterflies) (Set/2, SS/2, 2ea SS/1)

CE10	83pa	Chinese Yellow Swallowtail, <i>Papilio xuthus</i> L.	PAP, Papilioninae	A
CE11	89pa	Clipper, <i>Parthenos sylvia</i> Cramer	NYM, Limenitidinae	A
CE11a		SS/2 (Sc#CE10–11) (with white frames)		
CE16	SS 83pa	Chinese Yellow Swallowtail, <i>Papilio xuthus</i> L. (w/o frames)	PAP, Papilioninae	A
CE17	SS 89pa	Clipper, <i>Parthenos sylvia</i> Cramer (w/o frames)	NYM, Limenitidinae	A

**UNITED NATIONS****2016 February 5** (Free & Equal)

1128	\$1.20	Stylized woman with butterfly wings		S
------	--------	-------------------------------------	--	---

**UZBEKISTAN****2016 January 22** (Fauna) (Set/4)

794	1000s	Rose Chafer, <i>Cetonia aurata</i> L.	SCA, Cetoniinae	A
-----	-------	---------------------------------------	-----------------	---

**VENEZUELA****2015 November 25** (End Violence Against Women)

1731	338b	Three tiny U/I butterflies (Top to Bot: Nymphalidae, Nymphalidae, Pieridae)		U C
------	------	-----------------------------------------------------------------------------	--	-----

**VIETNAM****2015 October 20** (Beetles) (Set/4 & SS/4)

3535	3000d	Golden Stag Beetle, <i>Odontolabis cuvera fallaciosa</i> Boileau	LUC, Lucaninae	
3536	3000d	<i>Cheirotonus battareli</i> Pouillaude	SCA, Euchirinae	
3537	4500d	Giant Stag Beetle, <i>Dorcus titanus westermanni</i> Hope	LUC, Lucaninae	
3538	8000d	<i>Jumnos ruckeri tonkinensis</i> Nagai	SCA, Cetoniinae	
3538a		SS/4 (Sc#3535–38)		

# Beyond the Catalog

## CHAD

2015 (Impressor)

- |   |       |                                                                                     |                          |   |
|---|-------|-------------------------------------------------------------------------------------|--------------------------|---|
| a | 150fr | Bean Fly, <i>Ophiomyia phaseoli</i> Tryon                                           | Agromyzidae, Agromyzinae | A |
|   |       | (Suborder Cyclorrhapha, Superfamily Opomyzoidea, Family & subfamily new on stamps.) |                          |   |
| b | 150fr | Tsetse, <i>Glossina palpalis</i> Robineau-Desvoidy                                  | Glossinidae              | A |

2015 (Impressor) (MS/4)

- |        |       |                                                              |                    |     |
|--------|-------|--------------------------------------------------------------|--------------------|-----|
| a      | 300fr | <i>Mecynorhina torquata ugandensis</i> Moser                 | SCA, Cetoniinae    | A   |
| b      | 300fr | <i>Homoderus mellyi</i> Parry                                | LUC, Lucaninae     | A   |
| c      | 300fr | Picasso Bug, <i>Sphaerocoris annulus</i> Fabr.               | SCU, Scutellerinae | A   |
| d      | 300fr | Colorado Potato Beetle, <i>Leptinotarsa decemlineata</i> Say | CHR, Chrysomelinae | A   |
| Margin |       | UL: U/I Beetle                                               | Cerambycidae       | U Z |
|        |       | LL: U/I Beetle                                               | Coleoptera         | U Z |
|        |       | UR: U/I Leafhopper                                           | Cicadellidae       | U Z |
|        |       | LR: U/I Weevil                                               | Curculionidae      | U Z |

2015 (Impressor) (MS/6 & SS/1)

- |           |       |                                                                |                    |     |
|-----------|-------|----------------------------------------------------------------|--------------------|-----|
| a         | 350fr | African Monarch, <i>Danaus chrysippus</i> L. (with larva)      | NYM, Danainae      | A   |
| b         | 350fr | White Acraea, <i>Acraea circeis</i> Drury                      | NYM, Heliconiinae  | A   |
| c         | 350fr | Blue Pansy, <i>Junonia oenone</i> L.                           | NYM, Nymphalinae   | A   |
| d         | 350fr | Golden Pansy, <i>Junonia sophia</i> Fabr.                      | NYM, Nymphalinae   | A   |
| e         | 350fr | Painted Lady, <i>Vanessa cardui</i> L.                         | NYM, Nymphalinae   | A   |
| f         | 350fr | Spanish Festoon, <i>Zerynthia rumina</i> L.                    | PAP, Parnassiinae  | A   |
| Margin:   |       | Stylized butterfly in each corner                              |                    | S Z |
| SS 2000fr |       | Speckled Wood, <i>Pararge aegeria</i> L.                       | NYM, Satyrinae     | A   |
| Margin    |       | UL: U/I Butterfly                                              | Nymphalidae        | U Z |
|           |       | LL: Gold-Banded Forester, <i>Euphaedra neophron</i> Hopffer    | NYM, Limenitidinae | Z   |
|           |       | UR: U/I Butterfly                                              |                    | U Z |
|           |       | LR: Giant African Swallowtail, <i>Papilio antimachus</i> Drury | PAP, Papilioninae  | Z   |

## DJIBOUTI

2016 January 25 (Scorpions) (MS/4) (Stamperija DJB-16119a)

- |   |       |                                                    |                        |   |
|---|-------|----------------------------------------------------|------------------------|---|
| c | 260fr | Orange-Spotted Roach, <i>Blaptica dubia</i> Schaum | Blaberidae, Blaberinae | B |
|---|-------|----------------------------------------------------|------------------------|---|

2016 May 5 (Anti-Malaria) (Stamperija DJB-16313a-b)

- |          |       |                                        |                  |   |
|----------|-------|----------------------------------------|------------------|---|
| b        | 280fr | <i>Anopheles</i> sp. (with sick child) | CUL, Anophelinae | B |
| SS 960fr |       | <i>Anopheles</i> sp.                   | CUL, Anophelinae | A |

2016 May 5 (Butterflies) (MS/4 & SS/1) (Stamperija DJB-16320a-b)

- |          |       |                                                              |                     |     |
|----------|-------|--------------------------------------------------------------|---------------------|-----|
| a        | 280fr | Cranberry Fritillary, <i>Boloria aquilonaris</i> Stichel     | NYM, Heliconiinae   | A   |
| b        | 280fr | Checkered White, <i>Pontia protodice</i> Boisduval & LeConte | PIE, Pierinae       | A   |
| c        | 280fr | Gray Hairstreak, <i>Strymon melinus</i> Hübner               | LYC, Theclinae      | A   |
| d        | 280fr | Brown Argus, <i>Arícia agestis</i> Denis & Schifferrmüller   | LYC, Polyommatainae | A   |
| Margin   |       | L: U/I Butterfly (head)                                      | LYC, Polyommatainae | U Z |
| SS 960fr |       | Scarlet/Red/Crimson Tip, <i>Colotis danae</i> Fabr.          | PIE, Pierinae       | A   |
| Margin   |       | LL: Monarch, <i>Danaus plexippus</i> L.                      | NYM, Danainae       | Z   |
|          |       | LR: Gorgon Copper, <i>Lycaena gorgon</i> Boisduval           | LYC, Polyommatainae | Z   |

## GUINEA-BISSAU

2016 April 21 (Butterflies) (MS/4 & SS/1) (Stamperija GB-16306a-b)

- |        |       |                                                               |                    |   |
|--------|-------|---------------------------------------------------------------|--------------------|---|
| a      | 825fr | Crimson Rose, <i>Atrophaneura hector</i> L.                   | PAP, Papilioninae  | A |
| b      | 825fr | Apollo, <i>Parnassius apollo</i> L.                           | PAP, Parnassiinae  | A |
| c      | 825fr | Viceroy, <i>Limenitis archippus</i> Cramer                    | NYM, Limenitidinae | A |
| d      | 825fr | Blue Doctor, <i>Rhetus periander</i> Cramer                   | RIO, Riordininae   | A |
| Margin |       | UL: Golden Birdwing, <i>Troides aeacus</i> C&R Felder (larva) | PAP, Papilioninae  | Z |
|        |       | UR: Blue Pansy, <i>Junonia orithya</i> L.                     | NYM, Nymphalinae   | Z |

**GUINEA-BISSAU** (continued)

SS 3300fr	L: Common Morpho, <i>Morpho helenor peleides</i> Kollar	NYM, Morphinae	B
	R: Scarce Bamboo Page, <i>Philaethria dido</i> L.	NYM, Heliconiinae	B
Margin	Golden Birdwing, <i>Troides aeacus</i> C&R Felder (chrysalis/adult)	PAP, Papilioninae	Z

**2016 June 27** (Butterflies) (MS/4) (Stamperija GB-16514a)

a	900fr	Yellow Pansy, <i>Junonia hierta</i> Fabr.	NYM, Nymphalinae	A
b	900fr	Western Scalloped Epitola, <i>Stempfferia leonina</i> Staudinger	LYC, Poritiinae	A
c	900fr	The Friar, <i>Amauris niavius</i> L.	NYM, Danainae	A
d	900fr	Scarlet/Red/Crimson Tip, <i>Colotis danae</i> Fabr.	PIE, Pierinae	A
Margin		Top: Common Eggfly, <i>Hypolimnas bolina</i> L. ♂	NYM, Nymphalinae	Z

**MALDIVE ISLANDS****2016 May 23** (Butterflies & Orchids) (MS/4 & SS/1) (MLD-16305a–b)

a	20r	<i>Papilio maraho</i> Shiraki & Sonan	PAP, Papilioninae	(new) A
b	20r	Blue Doctor, <i>Rhetus perianther</i> Cramer	RIO, Riordininae	A
c	20r	Common Banded Peacock, <i>Papilio crino</i> Fabr.	PAP, Papilioninae	A
d	20r	Sapho Longwing, <i>Heliconius sapho</i> Drury	NYM, Heliconiinae	A
	SS 60r	Pipevine Swallowtail, <i>Battus philenor</i> L.	PAP, Papilioninae	A
Margin		LR: Common Banded Peacock, <i>Papilio crino</i> Fabr.	PAP, Papilioninae	Z

**MOZAMBIQUE****2016 January 15** (Butterflies) (MS/4 & SS/1) (MOZ-16122a–b)

a	66m	Tiger Longwing, <i>Heliconius hecale</i> Fabr.	NYM, Heliconiinae	A
b	66m	Malabar Tree Nymph, <i>Idea malabarica</i> Moore	NYM, Danainae	A
c	66m	Blue Lacewing, <i>Cethosia cyane</i> Drury	NYM, Heliconiinae	A
d	66m	Blue Morpho, <i>Morpho menelaus</i> L.	NYM, Morphinae	A
Margin		UL: Scarlet Mormon, <i>Papilio deiphobus rumanzovia</i> Eschscholtz	PAP, Papilioninae	Z
		LL: Emerald or Green-Banded Swallowtail, <i>Papilio palinurus</i> Fabr.	PAP, Papilioninae	Z
	SS 175m	Emerald or Green-Banded Swallowtail, <i>Papilio palinurus</i> Fabr.	PAP, Papilioninae	A
Margin		LL: Peacock, <i>Nymphalis io</i> L.	NYM, Nymphalinae	Z
		Top: Zebra, <i>Heliconius charithonia</i> L.	NYM, Heliconiinae	Z
		UR: Green-Spotted Triangle, <i>Graphium agamemnon</i> L.	PAP, Papilioninae	Z
		LR: Blue Morpho, <i>Morpho menelaus</i> L.	NYM, Morphinae	Z

**NIGER****2016 May 28** (Butterflies) (MS/4 & SS1) (Stamperija NIG-16202a–b)

a	750fr	Eastern Tiger Swallowtail, <i>Papilio glaucus</i> L.	PAP, Papilioninae	
b	750fr	Giant Swallowtail, <i>Papilio cressphontes</i> Cramer	PAP, Papilioninae	
c	750fr	Red Admiral, <i>Vanessa atalanta</i> L.	NYM, Nymphalinae	
d	750fr	Large Tree Nymph, <i>Idea leuconoe</i> Erichson	NYM, Danainae	
	SS 2500fr	Doris Longwing, <i>Laparus doris</i> L.	NYM, Heliconiinae	
Margin		Great Purple, <i>Sasakia charonda</i> Hewitson	NYM, Apaturinae	

**ST. THOMAS & PRINCE IS.****2016 March 30** (Butterflies) (MS/4 & SS/1) (Stamperija ST-16207a–b)

a	31000d	Punchinello, <i>Zemeros flegyas</i> Cramer (also in UL margin)	RIO, Riordininae	A
b	31000d	Common Map, <i>Cyrestis thyodamas</i> Boisduval	NYM, Cyrestinae	A
c	31000d	American Lady, <i>Vanessa virginiensis</i> Drury (also in LL margin)	NYM, Nymphalinae	A
d	31000d	Blue Emperor, <i>Papilio ulysses</i> L.	PAP, Papilioninae	A
Margin		LR: Crowned Hairstreak, <i>Evenus coronata</i> Hewitson	LYC, Theclinae	Z
	SS 96000d	Blue Doctor, <i>Rhetus perianther</i> Cramer	RIO, Riordininae	A
Margin		UL: White Morpho, <i>Morpho polyphemus</i> Westwood	NYM, Morphinae	Z
		ML: Large Tree Nymph, <i>Idea leuconoe</i> Erichson	NYM, Danainae	Z
		LL: Mocker Swallowtail, <i>Papilio dardanus</i> Brown	PAP, Papilioninae	Z
		UR: White Morpho, <i>M. polyphemus</i> Westwood (w/ 2 chrysalids)	NYM, Morphinae	Z
		LR: U/I Butterfly (Cap: <i>Papilio dardanus</i> )	?Pieridae	U Z

**ST. THOMAS & PRINCE IS. (cont) 2016 March 30 (Anti-Malaria) (SS/1) (Stamperija ST-16214b)**

SS 96000d	<i>Anopheles gambiae</i> Giles (with nurse & child under bed net)	CUL, Anophelinae	B
-----------	-------------------------------------------------------------------	------------------	---

**2016 March 30 (Endangered Animals) (SS/1) (Stamperija ST-16219b)**

SS 96000d	UL & LR: Bay Checkerspot, <i>Euphydryas editha bayensis</i> Sternitzky	NYM, Nymphalinae	Z
-----------	------------------------------------------------------------------------	------------------	---

**SIERRA LEONE****2015 December 21 (Scout Jamboree) (New Data) (SRL-15702)**

a	6500Le	Alpine Black Swallowtail, <i>Papilio maackii</i> Ménétries	PAP, Papilioninae	A
	SS 26000Le	LL: Magpie Moth, <i>Abraxas grossulariatus</i> L. (larva)	GEO, Ennominae	Z
		UR: 2-Tailed Pasha, Foxy Charaxes, <i>Charaxes jasius</i> L.	NYM, Charaxinae	Z

**SOLOMON ISLANDS****2016 May 13 (Butterflies) (MS/4 & SS/1) (Stamperija SLM-16102a-b)**

a	\$7	Eastern Tiger Swallowtail, <i>Papilio glaucus</i> L.	PAP, Papilioninae	A
b	\$7	Silver-Studded Blue, <i>Plebejus argus</i> L.	LYC, Polyommatae	A
c	\$7	Monarch, <i>Danaus plexippus</i> L.	NYM, Danainae	A
d	\$7	Lesser Purple Emperor, <i>Apatura ilia</i> Denis & Schiffermüller	NYM, Apaturinae	A
Margin		Bkgrd: ~80 Butterfly images of ~10 different species	Lepidoptera	Z
SS \$35		Lime Swallowtail, <i>Papilio demoleus</i> L.	PAP, Papilioninae	A
Margin		Top: Marbled White, <i>Melanargia galathea</i> L.	NYM, Satyrinae	Z
		(Cap: <i>Limenitis archippus</i> )		
		Bkgrd: ~80 Butterfly images of ~10 different species	Lepidoptera	Z

**TOGO****2016 May 20 (Bee-Eaters) (Stamperija TG-16201a-b)**

a	900fr	U/I Bees chased by birds to right	API, Apinae	U B
b	900fr	U/I Bees chased by birds to left	API, Apinae	U B
Margin		U/I Bee in bird's beak	API, Apinae	U Z
SS 3000fr		U/I Bees chased by birds	API, Apinae	U B
Margin		LL & LR: U/I Bees	API, Apinae	U Z

**2016 May 20 (Butterflies) (MS/4 & SS/1) (Stamperija TG-16202a-b)**

a	900fr	Large Tree Nymph, <i>Idea leuconoe</i> Erichson	NYM, Danainae	A
b	900fr	Malay Cruiser, <i>Vindula dejone</i> Erichson	NYM, Heliconiinae	A
c	900fr	Peacock Pansy, <i>Junonia almana</i> L.	NYM, Nymphalinae	A
d	900fr	Great Mormon, <i>Papilio memnon</i> L. (also in R margin)	PAP, Papilioninae	A
SS 3000fr		Great Mormon, <i>Papilio memnon</i> L. (also in UR margin)	PAP, Papilioninae	A
Margin		LR: Large Tree Nymph, <i>Idea leuconoe</i> Erichson	NYM, Danainae	Z

\* \* \* \* \*

Here is the annual report on insect new issues. In calendar 2015, we had the third lowest number of new stamps in the past 20 years. Locals and known illegal issues are not included. The 20 year total is 8,978.

1996	~400 stamps	2004	~270 stamps	2012	297 stamps
1997	~595 stamps	2005	~340 stamps	2013	471 stamps
1998	~625 stamps	2006	~315 stamps	2014	314 stamps
1999	~665 stamps	2007	~310 stamps	2015	240 stamps
2000	~825 stamps	2008	~185 stamps		
2001	~955 stamps	2009	~235 stamps		
2002	~610 stamps	2010	~265 stamps		
2003	~455 stamps	2011	~275 stamps		
Non-catalog (Stamperija)					
2013	321 stamps	2014	331 stamps	2015	323 stamps



\*The following is a loose translation from the German publicity release concerning the above listed stamp showing the 40× magnified antenna of a male Small Emperor Moth:

“Micro-Worlds” Series

The name is deceptive. Although called the “Small Emperor Moth” (*Saturnia pavonia*), it is one of the larger and most beautiful moths in Europe. In addition, the male distinguishes itself through its expansive, fan-shaped antenna. The unusual appearance of the antenna can indeed be seen by the naked eye, but only in 40-fold magnification is its unique form apparent. This is possible using a special photo technique called photomicrography.

The photomicrograph uses, in some cases, a source connected to a microscope camera. When thus seen, the antenna reveals the basic structures of an evolutionary stroke of genius, which would never be seen without magnification. Few photographers have mastered the art of photomicrography as has Prof. Manfred P. Kage, who provided the original illustration of the moth antenna shown on the stamp. By means of advanced microscope technology, he shows the microcosm in a whole new light.

The females reach a wingspan of about 7–8 centimeters. The wings of males are about 5–6 centimeters. Its smaller size and different coloring gives the male a different appearance. The wings of the male are colored contrasting orange, white, black, and some pink. The females are colored inconspicuously, having brown, gray, and white wings.

Common to both are distinctive eye-like spots on the wings, which probably serve to deter enemies. The half-moon-shaped markings at the top make the “eyes” appear particularly realistic. In addition, the name of this insect is misleading. Only the female Small Emperor Moth acts like a moth, in that it flies at night. The male, like butterflies, is mainly active in the day and flies from April to May in gardens and open areas. His only goal: a female whose pheromones he can perceive for kilometers using his feathered antenna.



*Saturnia pavonia*  
Germany, 2016



*S. pavonia* ♀ & ♂  
Czech Rep, 2009, Sc#3626a

## STATE BIRD

The Northern Cardinal (*Cardinalis cardinalis*) is the official bird of seven U.S. states. Maybe this shows a lack of imagination, but can you name all of the states? Answer is on page 166.

Bonus: What intriguing fact links these states? Answer in next issue.





# PALEONTOLOGY

Editor

Michael Kogan, BU1863

New Listings



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

## CANADA

**2016 May 26** (Dinosaurs of Canada) (MS/5 & Bklt/10)

Despite the title of this issue, only two of the stamps actually depict dinosaurs. They are represented as a reflection in the eye of a predator, or the eye of another of their own species.

2923a	(85c)	<i>Troodon inequalis</i>	†Troodontidae	A
2923b	(85c)	<i>Dimetrodon borealis</i> (mammal like reptile)	†Sphenacodontidae	A
2923c	(85c)	<i>Elasmosaurus</i> sp. (Comox Valley) (marine reptile)	†Elasmosauridae	A
2923d	(85c)	<i>Cypretherium coarctatum</i> (mammal)	†Entelodontidae	A
2923e	(85c)	<i>Acrotholus audeti</i>	†Pachycephalosauridae	A
2923		MS/5 (Sc#2923a–e) (perf 13)		
2924	(85c)	<i>Troodon inequalis</i>	†Troodontidae	A
2925	(85c)	<i>Cypretherium coarctatum</i> (mammal)	†Entelodontidae	A
2926	(85c)	<i>Dimetrodon borealis</i> (mammal like reptile)	†Sphenacodontidae	A
2927	(85c)	<i>Acrotholus audeti</i>	†Pachycephalosauridae	A
2928	(85c)	<i>Elasmosaurus</i> sp. (Comox Valley) (marine reptile)	†Elasmosauridae	A
2928a		Bklt/10 (2ea Sc#2924–28) (die cut 13¼) (s/a)		

## CUBA

**2016 January 31** (Dinosaurs) (Set/6 & SS/1)

Planned for release on 31 January, but appeared on the market and in local post offices in middle of July.

5c	<i>Cryolophosaurus</i>	Clade: Tetanurae	A
20c	<i>Amargasaurus</i>	†Dicraeosauridae	A
65c	<i>Camarasaurus</i>	†Camarasauridae	A
75c	<i>Pachyrhinosaurus</i>	†Ceratopsidae	A
85c	<i>Baryonyx</i>	†Spinosauridae	A
90c	<i>Allosaurus</i>	†Allosauridae	A
SS 1p	<i>Gorgosaurus</i> (simulated perforations) (also in margin)	†Tyrannosauridae	A
Margin	Top: <i>Argentinosaurus</i>	†Antarctosauridae	Z

## DJIBOUTI

**2016 May 5** (Dinosaurs) (MS/4 & SS/1) [1]

a	280fr	<i>Tyrannosaurus rex</i>	†Tyrannosauridae	A
b	280fr	<i>Microraptor zhaoianus</i>	†Dromaeosauridae	A
c	280fr	<i>Dakotaraptor steini</i>	†Dromaeosauridae	A
d	280fr	<i>Chasmosaurus</i>	†Ceratopsidae	A
SS 960fr	<i>Deinocheirus mirificus</i>	†Deinocheiridae	A	
Margin	Bot: <i>Kentrosaurus aethiopicus</i>	†Stegosauridae	Z	

## HUNGARY

**2016 June 08** (Hungary's Geological Treasures) (Set/2 & SS/1)

Paleobotany: Fossilized plants and petrified forest.

115fo	<i>Daphnogene polymorpha</i>	Lauraceae	A
145fo	<i>Raskya vetusta</i>	<i>Incertae sedis</i>	A
SS 600fo	<i>Glyptostrobus europaeus</i>	Cupressaceae	A
Margin	R: Petrified forest		Z

**MALDIVE ISLANDS****2016 May 23** (Dinosaurs) (MS/4 & SS/1) (odd shaped) [1]

a	20r	<i>Achelousaurus</i>	†Ceratopsidae	A
b	20r	<i>Afrovenator</i>	†Megalosauridae	A
c	20r	<i>Nipponosaurus sachalinensis</i>	†Hadrosauridae	A
d	20r	<i>Pyroraptor olympius</i>	†Dromaeosauridae	A
	SS 60r	<i>Stegosaurus</i>	†Stegosauridae	A
	Margin	UL: <i>Ouranosaurus nigeriensis</i>	Clade: †Hadrosauriformes	Z
		UR: <i>Edmontonia</i>	†Nodosauridae	Z
		LL & LR: <i>Alamosaurus sanjuanensis</i>	†Saltasauridae	Z
		ML: <i>Dimetrodon</i>	†Sphenacodontidae	Z
		MR: <i>Udanoceratops tschizhovi</i>	†Leptoceratopsidae	Z

**MONACO****2016 June 24** (Centenary Excavations at Exotic Garden Cave)

€1.60	Prince Albert I and excavation at prehistoric cave	R
-------	----------------------------------------------------	---

**MOZAMBIQUE****2016 January 15** (Cave Paintings: Extinct Animals) (MS/4 & SS/1) [1]

a	66m	Giant Moa, <i>Dinornis</i>	†Dinornithidae	A
b	66m	Ground Sloth, <i>Megatherium</i>	†Megatheriidae	A
c	66m	<i>Glyptodon</i>	Chlamyphoridae	A
d	66m	Great Auk, <i>Pinguinus impennis</i>	Alcidae	A
	Margin	Bot: Dodo, <i>Raphus cucullatus</i>	Columbidae	Z
	SS 175m	Dodo, <i>Raphus cucullatus</i>	Columbidae	A
	Margin	UR: Mammoth, <i>Mammuthus</i>	Elephantidae	Z

**NIGER****2016 May 28** (Dinosaurs) (MS/4 & SS/1) [1]

a	750fr	<i>Tapejara imperator</i>	†Tapejaridae	A
b	750fr	<i>Gastonia burgei</i>	†Nodosauridae	A
c	750fr	<i>Psittacosaurus mongoliensis</i>	†Psittacosauridae	A
d	750fr	<i>Anhanguera blittersdorffi</i>	†Anhangueridae	A
	SS 2500fr	<i>Ouranosaurus nigeriensis</i>	Clade: †Hadrosauriformes	A
	Margin	LL: <i>Carcharodontosaurus saharicus</i>	†Carcharodontosauridae	Z
		LR: <i>Utahraptor ostrommaysorum</i>	†Dromaeosauridae	Z

**SIERRA LEONE****2016 April 29** (Conrad Gessner) (MS/4 & SS/1) [1]

Conrad Gessner (1516–1565) was the first naturalist to write a book about fossils, titled, *De omni rerum fossilium genere, gemmis, lapidibus, metallis, et huiusmodi* (1565).

a	6000Le	Gessner portrait	R
		MS/4 (portrait & illustrations from <i>History of Animals</i> )	
	SS 24000Le	SS/1 (portrait in margin)	R

**SPAIN****2016 Jun 30** (Dinosaurs II) (Set/4)

Dinosaurs I issued in 2015. This set distinguished from the previous issue in that local dinosaurs are depicted. Each stamp is printed with a different technique:

€2	<i>Europelta</i> (lenticular printing)	†Nodosauridae	A
€2	<i>Pelecanimimus</i> (with holographic ink)	Clade: †Ornithomimosauria	
€2	<i>Proa</i> (Premium Pliego 3D)	Clade: †Hadrosauriformes	A
€2	<i>Turiasaurus</i> (thermo-chromic ink changes with temperature)	Clade: †Turiasauria	A

**TOGO****2016 May 20** (Shells) (MS/4 & SS/1) [1]

SS 3000fr	R margin: Two U/I Ammonites	U Z
-----------	-----------------------------	-----

**TOGO (continued)****2016 May 20 (Dinosaurs) [1]**

a	900fr	<i>Dilophosaurus wetherilli</i>	†Dilophosauridae	A
b	900fr	<i>Suchomimus tenerensis</i>	†Spinosauridae	A
c	900fr	<i>Torosaurus</i>	†Ceratopsidae	A
d	900fr	<i>Saurolophus osborni</i>	†Hadrosauridae	A
	Margin	R: <i>Edmontosaurus</i>	†Hadrosauridae	Z
	SS 3000fr	<i>Tyrannosaurus rex</i>	†Tyrannosauridae	A
	Margin	R: <i>Velociraptor</i>	†Dromaeosauridae	Z

**Local Stamps**

**Note:** According to *Fédération Internationale de Philatélie* (FIP) regulations, issues of countries that are not recognized by the Universal Postal Union are not allowed in exhibitions organized or sponsored by the FIP. The FIP recommends that collectors avoid these stamps in their collections.

**Note:** On the original stamp of *Giganotosaurus* issued on March 18, the species is misspelled *Gigantosaurus* [Vol. 65(2)]. Three months after that issue, the Post Authority of this unrecognized territory corrected the mistake.

**TRANSNISTRIA****2016 June 25 (Prehistoric Animals) (MS/4) (re-issue)**

a	A	<i>Sinosauropteryx</i>	†Compsognathidae	A
b	K	<i>Velociraptor</i>	†Dromaeosauridae	A
c	T	<i>Giganotosaurus</i>	†Carcharodontosauridae	A
d	B	<i>Tyrannosaurus</i>	†Tyrannosauridae	A

**Personalized Issue****FRANCE****2016 May 19 (89th Congress of FFAP)**

This sheetlet was issued on 19 May at Paris by Phil@Poste for the French Federation of Philatelic Associations (FFAP) during the stamp show Paris-Philex 2016 and the 89th Congress of the FFAP. The stamp is a personalized one (1st national domestic rate) depicting a dinosaur skeleton (perhaps *T. rex*). A gastropod fossil from the Tertiary period (*Turritella* sp.), a cut amethyst crystal, and the Buffon statue (located in the botanical garden of the Natural History Museum at Paris) are on the margin.

(68c)	<i>Tyrannosaurus</i> skeleton (?) (Natural History Museum at Paris)	†Tyrannosauridae	A
Margin	<i>Turritella</i> sp. fossil (with amethyst crystal)	Turritellidae	Z

**Commemorative Postmarks****KOREA (South)****2016 July 9 (Dinosaur Fossil)**

The postmark used at annual philatelic show. More details about the dinosaur depicted on the postmark are wanted.

**Future Issues**

2016.10.12: Croatia: "Paleontology," MS/8

2016.10.12: Czech Republic: Postmark with ammonite

2015.11.05: Moldova: Extinct fauna of Moldova (very likely prehistoric animals, similar to the set from 2010)

Next Year:

2017.03.24: Slovenia: "Mammal Fossils in Slovenia: Cave Lion"

2017.??.?: Nepal: "Prehistoric Mammals," Set/8 proposed by Natural History Museum. If it is accepted, it will be the third set from Nepal to show local prehistoric mammals.

**Notes:**

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

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



## BIOLOGY REFERENCE WEBSITES

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

### STAMP ISSUES

**ATA TopicalsOnLine.** On-line stamp sales by topic and country. Anyone can be a buyer, but you must be an ATA member in good standing to be a seller. Robust search capability and reasonable prices.

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

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

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

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

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

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

[http://www.delcampe.net/en\\_GB/marketplace/stamps/](http://www.delcampe.net/en_GB/marketplace/stamps/)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

### GENERAL

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

<http://stamps.org/>

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

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

**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/>

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

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

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

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

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

<http://zipcodezoo.com/>

## BOTANY

**Fungal Biodiversity 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/>

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

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

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

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

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

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

## ENTOMOLOGY:

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

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

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

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

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

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

**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>

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

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

**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/our-science/data/butmoth/>

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

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

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

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

## HERPETOLOGY:

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

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

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

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

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

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

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

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

## ICHTHYOLOGY

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

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

**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](http://fishbase.sinica.edu.tw/home_tw.htm)

## MAMMALS

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

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

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

<http://www.vertebrates.si.edu/msw/mswcfapp/msw/index.cfm>

## ORNITHOLOGY

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

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

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

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

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

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

## PALEONTOLOGY:

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

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

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

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

## GLOSSARY OF TERMS

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

### Checklist Codes:

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

### 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
bklr	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	imperfectorate	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		



**MEMBERSHIP ROSTER**

This table lists the names and addresses of the members of the Biology Unit of the American Topical Association as of July 2016. This listing is for the use of the Unit members to assist with one of the missions of this organization, which is to promote the cooperative study of biological philately.

BU #	Name Last, First, MI	Street	City, State	Zip	Country	E-mail
L65	Adams, Francis	P.O. Box 420308	San Diego, CA	92142		fran.adams@gmail.com
L70	Adler, Leslie R.	1621 22nd Ave NW	Calgary, AB	T2M 1R4	Canada	
L73	Ahrendsen, Jon	728 Maple Lane	Clarion, IA	50525		jonahr@netins.net
1830	Anderson-Decina, Rick J.	(withheld)	Indianapolis, IN			rickandersondecina@gmail.com
1834	Andrews, Sarah M.	11528 Scottsbury Terr	Germantown, MD	20876		editor@sundragonediting.com
1567	Applebaum, Doris	(withheld)	Oak Park, MI			(withheld)
1856	Arias, Orlando	7581 Old Redmond Rd #13	Redmond, WA	98052		orlarias99@gmail.com
L22	Bajema, Dr. Carl J.	940 Shawmut Ct	Grand Rapids, MI	49504		
1677	Barylski, Mildred	189 North View Cir	Warrenton, VA	20186		mildredbarylski@gmail.com
1848	Batdorf, Lynn R.	6005 Kingsford Rd	Bethesda, MD	20817-2449		hollykids @comcast.net
1869	Bogart, James D.	3209 NE 130th Ct	Vancouver, WA	98682		
1820	Bono, Peter R.	P.O. Box 705	Yarmouth Port, MA	02675		pbono@prba.com
1878	Boorman, Ken	33 Courtyard Walk	Chatham, ON	N7L 5S3	Canada	lisas_lair_bookstore@kent.net
768	Bouzek, Maurine	P.O. Box 407	Highmore, SD	57345-0407		
1861	Brandt, Caroline	6241 SW Seymour St	Portland, OR	97221		ad7up@arrl.net
450	Bratlie, Byron	9705 Lake Bess Rd #909	Winter Haven, FL	33884		BBratlie@gmail.com
1364	Braun, Charles E.	7 Winthrop Dr	Aiken, SC	29803-6272		charlesebraun@gmail.com
L47	Brown, Harriet W.	7328 Barr Way	Sacramento, CA	95831		
1796	Brunt, Michael	(withheld)	Bellingham, WA			rc1492cc@gmail.com
1800	Bruth, Eric	92 Rue Maurice Arnoux	92120 Montrouge	92120	France	eric.bruth@gmail.com
1877	Buda, Marian	Agátová 5B	841 01 Bratislava		Slovakia	marian.buda@post.sk
1852	Burch, Ben	3112A Lewiston Ave	Berkeley, CA	94705-2717		benburch1950@hotmail.com
1445	Burness, Robert	1038 55th St	Sacramento, CA	95819		(withheld)
274	Byrnes, Patricia E.	410 Edgar Rd	Westfield, NJ	07090		(withheld)
L72	Chandler, Richard T.	4508 NE 49th St	Vancouver, WA	98661		
1835	Clark, Michael	130 Horseshoe Hill Rd	Pound Ridge, NY	10576		mikalcee@earthlink.net
1814	Collins, Beth	344 W Main St	Cottonwood, MN	56229		bc309167@gmail.com

BU #	Name Last, First, MI	Street	City, State	Zip	Country	E-mail
1424	Congrove, Jack R.	P.O. Box 33092	Fort Lewis, WA	98433-0092		jackcongrove@comcast.net
1799	Cooper, Phill	7538 E Desert Vista Rd	Scottsdale, AZ	85255		pac1954@cox.net
964	Crane, Leslie E.	787 Coon Hollow Rd	Shinglehouse, PA	16748		
1269	Dahle, Christopher E.	1401 Linmar Dr NE	Cedar Rapids, IA	52402-3724		cdahle8@gmail.com
1857	Das, Indraneil	University of Malaysia Sarawak	Kota Samaraman, Sarawak	94300	Malaysia	idas@ibec.unimas.my
1768	Davidson, Larry	30 Front St, Apt. 307	Stratford, ON	N5A 7S3	Canada	lawrencedavidson@gmail.com
1860	Davis, Asher B.	28 Bancroft Rd	Northampton, MA	01060		theherpkid@gmail.com
1879	De Nobile, Louis	1481 Leprohon	Montreal, QC	H4E 1P1	Canada	denlemsom@yahoo.ca
1706	Douglas, Robert G.	P.O. Box 6, Aminya St	Mansfield, QLD	4122	Australia	rdouglas42@optusnet.com.au
1837	Drago, Cláudio	Al. Santos 734 ap.25, Cerqueira Cesar	São Paulo, SP	01418-100	Brazil	cddrago@uninet.com.br
1790	Edholm, Keith & Carol	(withheld)	Mountlake Terrace, WA			peafowlphilatelics@gmail.ccom
1850	Eichler, Dr. Vic B.	10867 Dutch Settlement Rd	Three Rivers, MI	49093		vic.eichler33@gmail.com
1871	Felts, Vera	1102 Mockingbird Ln	Carterville, IL	62918-1618		vera_1102@yahoo.com
L45	Fibel, Jr., Joseph L.	94 Beverly Rd	New Rochelle, NY	10804		
581	Foster, Dr. Merrill W.	1119 N Maplewood Ave	Peoria, IL	61606-1037		fossil@bradley.edu
L82	Freytag, Dr. Paul H.	2104 Palmbrooke Ct	Lexington, KY	40513-1125		(withheld)
1781	Gerner, Glen	3157 Hillview Ct	Edgewood, KY	41017		rrdesign1us@yahoo.com
1714	Gilman, Robert	2804 Plum Ct	Kokomo, IN	46902		drdragilman@comcast.net
503	Glatz, Roberta	524 Copeland Hill Rd	Feura Bush, NY	12067-2052		squashbee2@aol.com
L66	Gomez, Dr. D. Edgardo	108 Batangas North St, Ayalabang	Muntinlupa City	1780	Philippines	edgomezph@yahoo.com
1855	Gray, John	47 Barrons Way, Comberton	Cambridge	CB23 7EQ	England	jcg2@cam.ac.uk
1425	Greve, John H.	2417 Hamilton St	Ames, IA	50014		(withheld)
1533	Grimstad, Paul R.	52022 Heather Cove	South Bend, IN	46635-1059		(withheld)
1803	Grothaus, Craig L.	39 Crestview Rd	Mountain Home, AR	72653		grot@centurytel.net
1751	Halbedel, Elaine M.	P.O. Box 151	Silver City, NM	88062-0151		inannaqoh@aol.com
1254	Hamilton, Sarah E.	900 Chapman St	Ionia, MI	48846-1018		
1831	Hamman, Dawn	334 Rio Terra	Venice, FL	34285		dawnthephilatelist@gmail.com
1387	Hammond, Edward	P.O. Box 823	Branford, CT	06405		edstamp@comcast.net
698	Hanks, Alan J.	34 Seaton Dr	Aurora, ON	L4G 2K1	Canada	alan.hanks@sympatico.ca

BU #	Name Last, First, MI	Street	City, State	Zip	Country	E-mail
1818	Harrison, Terry	629 N Bush St	Anaheim, CA	92805-2117		(withheld)
1792	Hayward, Jeffrey A.	163 Baden Pl	Staten Island, NY	10306-6048		stamps@jeffhayward.com
856	Herbert, Greg	3739 Spring Lake Ln	Owings Mills, MD	21117		dvm27@comcast.net
1685	Herrmann, Lois C.	(withheld)	Santa Fe, NM			(withheld)
1492	Herzog, David R.	(withheld)	Holdingford, MN			(withheld)
L58	Hinkel, Manfred D.	Am Rotes Tor 63	D55232 Alzey		Germany	Manfred.Hinkel.AZ@t-online.de
1654	Holland, Jr., F. D.	Parkwood Pl #342, 749 S 30th St	Grand Forks, ND	58201		budholland@gra.midco.net
1862	Hoppe, Patricia J.	(withheld)	Ontario, CA			(withheld)
1619	Hunter, Ian	228 7th Ave NE	Calgary, AB	T2E 0M7	Canada	ighunter@shaw.ca
1776	Johnson, Donald E.	40 S Forest Ave	Naperville, IL	60540		don43.j@sbcglobal.net
1843	Jones, Susan B.	1665 Francis Dr	Pingree Grove, IL	60140		sjones1665@comcast.net
1743	Jordan, Terry L.	P.O. Box 650097	Potomac Falls, VA	20165-0097		
1872	Kahle, Anne	232 Timberwood Dr	Castle Rock, WA	98611		wanderingalb@msn.com
1482	Kavalecs, Stephen	(withheld)	Harrisburg, PA			ddfan1@comcast.net
L42	Kley, Dr. Ruben Reis	(withheld)	São Paulo, SP		Brazil	(withheld)
1863	Kogan, Michael	Buschingstr. 69, 9/1	81677 Munich		Germany	michael.kgn@gmail.com
L64	Komadowski, Henry E.	1411 12th Ave North	Lethbridge, AB	T1H 1R2	Canada	henryk2@telus.net
L60	Kritzman, Ellen B.	107010 SW Cowan Rd	Vashon, WA	98070-3052		ekritzman@centurytel.net
674	Law, A. Ronald	3607 Utah Dr NW	Calgary, AB	T2N 4A6	Canada	lawron@shaw.ca
1821	Lerner, William	3104 West Strathmore Ave	Baltimore, MD	21215		wlerner44@gmail.com
L77	Lindstrom, Kris P.	P.O. Box 51008	Pacific Grove, CA	93950		kplenviro2@sti.net
L67	Littlewood, Roland K.	5109 Coney Weston Pl	Madison, WI	53711		rklittle@wisc.edu
1841	Lloyd, Randy W.	P.O. Box 1963	North Platte, NE	69103-1963		rwlloyd_2000@yahoo.com
1600	Mahaffey, William A.	P.O. Box 493	Upper Sandusky, OH	43351		wmahaffey@udata.com
1825	Matveev, Alexey	Radouňova 2681/24	Prague	15500	Czech Rep.	alexey.matveev@fauna-stamps.com
1810	Mauney, Patrick	P.O. Box 1236	Sagamore Beach, MA	02562		pinetops236@earthlink.net
1830	McDonald, Thomas E.	3350 Uplands Dr	Nanaimo, BC	V9T 2T5	Canada	mcdonaldte@shaw.ca
1870	McGuinness, Rob	816-235 Keith Rd	West Vancouver, BC	V7T 1L5	Canada	mrmacis@shaw.ca
1868	McKee, Karen	762 29th St	Port Townsend, WA	98368		karen@olympus.net
1839	McNair, Stephen	3432 Berkwood Pl	Frisco, TX	75034		mcnairs1@aol.com

BU #	Name Last, First, MI	Street	City, State	Zip	Country	E-mail
1435	Mertz, Glenn G.	625 N Lafayette St	Allentown, PA	18842-1666		ggmertz@juno.com
1840	Miguelgorry, James G.	846 N Sixth St	San Jose, CA	95112		(withheld)
1730	Mirando, Peter A.	83 Sunset Blvd	Angola, NY	14006-1038		drpmira@mac.com
1681	Mistretta, Dr. Paul A.	4148 Commodore Dr	Atlanta, GA	30341		paulmistretta70@gmail.com
1729	Moravec, Dr. Zdenek	Vrazska 331	252 28 Cernosice		Czech Rep.	moravec.zd@volny.cz
1873	Morris, Joseph	6427 SE 85th Ave	Portland, OR	97266		pdxjmorris@gmail.com
1822	Norman, Sven	Bäling 118	Gnarp	SE-820 77	Sweden	(withheld)
1866	Noyce, John	(withheld)				jandhnoyce@gmail.com
981	Nystuen, Gwen	1016 Olivia Ave	Ann Arbor, MI	48104-3929		gnystuen@umich.edu
1757	Palazzo, Don	P.O. Box 456	Foxboro, MA	02035-0456		stamps@westmin.win.net
1777	Patterson, Joanne	726 Loveville Rd, Apt. 221	Hockessin, DE	19707-1505		joanepatterson07@comcast.net
1823	Peggy J. Slusser Library	920 North First Ave	Tucson, AZ	85719		library@phftucson.org
1813	Pereira, John	193 Blackmer St	New Bedford, MA	02744		johnPereira@gmail.com
949	Phipps, Timothy J.	156 Staplehurst Rd	Sittingbourne, Kent	ME10 1SY	England	tim.lyn@btinternet.com
L68	Prince, Michael J.	"Dorset", Grove Rd, Ash Vale	Aldershot, Hants	GU12 5BD	England	michael.prince@bushinternet.com
1632	Reif, William	500 35th St SE	Cedar Rapids, IA	52403		(withheld)
1725	Reineke, Mark	925 Boychuk Dr	Saskatoon, SK	S7H 4L6	Canada	mikadoate@sasktel.net
61	Ridgely, Dr. Beverly S.	355 Blackstone Blvd, Apt. 101	Providence, RI	02906		
L83	Roman, Dick	(withheld)	St Louis, MO			dick.roman@sbcglobal.net
L81	Rong-yuan, Lian	P.O. Box 19-25	Chung-Li, 320		Taiwan	
1844	Russ, Gina	48 Thompson Ave	Fort Mitchell, KY	41017-2709		(withheld)
1719	Ryan, Laurie J.	4134 Wenbrook Dr	Cincinnati, OH	45241		doxiemom7@gmail.com
1603	Samford, Arlene	P.O. Box 1164	Cherokee, NC	28719-1164		
1849	Schoen, Fred	1218 Third Ave, #2000	Seattle, WA	98101		fredsfredo@yahoo.com
1845	Setterberg, Susan	(withheld)	Ridgefield, WA			smsetterberg@yahoo.com
1778	Sheppard, Stuart	27 Hillview Dr, RR#1	Bobcaygeon, ON	K0M1A0	Canada	(withheld)
1832	Shively, J. Dale	106 Lazy Lane	San Marcos, TX	78666-9538		jdshively@icloud.com
1712	Shore, Randall L.	20385 Pintail Ln, Schooner Bay	Onancock, VA	23417		randalllee@verizon.net
1842	Siegling, Evan (Van)	243 Landover Rd	Gahanna, OH	43230-3175		sieglinge@yahoo.com
1876	Singh, Kuljit	40 Jalan Perak, Canning Garden	31400 Ipoh, Perak		Malaysia	kusi1801@gmail.com



BU #	Name Last, First, MI	Street	City, State	Zip	Country	E-mail
L49	Skapston, James L.	3321 Scotsmore Way	Herndon, VA	22071-4062		jskap@verizon.net
1836	Skog, Laurence E.	611 Roberts Dr NW	Vienna, VA	22180-4178		treed59@gmail.com
L79	Skvara, Dr. Frederick C.	P.O. Box 6228	Bridgewater, NJ	8807		fcskvara@optonline.net
1864	Smith, Dale & Andrea	1212 NE 96th Terr	Kansas City, MO	64155-2149		smidale@umkc.edu
1252	Stansfield, William T.	31 Barnhill Ct	Fairfield, CT	06825		wtstans@aol.com
1801	Stout, Jean C.	656 April Sound	Pearl, MS	39208-6603		jeanstout61@att.net
L69	Stragnell, Robert	(withheld)	Hanover, NH			(withheld)
1471	Stumpenhaus, Cathie	(withheld)	Portland, OR			clstumpe@hotmail.com
1745	Svoboda, Wayne	8828 Bennett Ave	Evanston, IL	60203-1901		
L43	Truhon, Dorothy L.	4000 NW 20th Dr	Gainesville, FL	32605		
1880	Uicker, John	1720 Severn Rd	Severn, MD	21144		jruicker@gmail.com
L84	Urbani, Bernardo	Apartado 66.755	Caracas 1061-A		Venezuela	urbaniglobal@yahoo.com
1875	Vancutsem, Jeroen	Houtenmolenstraat 46	9255 Buggenhout		Belgium	jeroenvancutsem@hotmail.com
1838	Van Laere, Roger	Grote Stoppelbergen 15	2040 Antwerpen		Belgium	roger-van-laere@skynet.be
1824	Vassuer, Mary	4149 Ruxton Lane	Columbus, OH	43220		
792	Vaughn, Charles R.	P.O. Box 241	Seaford, DE	19973		essc@comcast.net
1858	Vincent, Michael A.	609 French Dr	Oxford, OH	45056		fabaceae@hotmail.com
1809	Vogel, Dr. Beatrice	46 S Howie	Helena, MT	59601		beavogel@mt.net
L75	Wallace, Scott	356 Lincoln Ave	Palo Alto, CA	94301		scottgwallace@yahoo.com
L78	Walsh, Roberta	P.O. Box 332	Newport, NY	13416		froglady2_1999@yahoo.com
1865	Waterstreet, Darlene	3317 Adams St	Two Rivers, WI	54241		(withheld)
1881	Weber, Dan	6811 N Glen Shore Dr	Milwaukee, WI	53209		kibbutzweber@gmail.com
1874	White, Kate	P.O. Box 400	Matteson, IL	60443-0400		kate8765@gmail.com
L63	Wilkie, David B.	5710 Redwood River Dr	Kingwood, TX	77345		
L53	Willems, Pippa	"Argyle," Quondong Rd	Grenfell, NSW	2810	Australia	
1683	Wilson, Peter	1326 Phoebe Lane	Garland, TX	75042-8031		(withheld)
1296	Wongpakdee, Dr. Sobsan	Watthasoong, A. Muang	Uthaitani Province	61000	Thailand	
243	Wright, Donald P.	84 Woosamonsa Rd	Pennington, NJ	08534-3803		aa2f@arri.net
1769	Yagi, Betty H.	6112 Old Log Trail	Kalamazoo, MI	49009		(withheld)
1867	Zimmerman, Jerald	2200 Brown	Waxahachie, TX	75165		jdzimman@att.net