

ALEXANDER von HUMBOLDT: THE FIRST ENVIRONMENTALIST

Dr. Lyman R. Caswell, Washington

[Ed. Note: This is the final installment of a four-part article on the life of Alexander von Humboldt. See Vol. 65 (3), Vol. 65 (4), and Vol. 66 (1) for first three parts of this article. 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.]

México

The travelers climbed the hills surrounding Acapulco and collected botanical specimens. Four days later they began the trip to Mexico City. Along the way, at Tasco, they visited the oldest silver mine in México, which had been opened in 1522. On 11 April 1803, they arrived in México City.

In Mexico City, Humboldt met with the Viceroy, who gave him access to the archives of the Viceroyalty. He renewed his acquaintance with chemist Manuel Andrés del Río (Fig. 46), who had been a fellow student with him at the Freiberg Mining Academy. Del Río was now professor of oryctognosy (an old name for mineralogy) at the Royal College of Mines, the first technical college in the Western Hemisphere. Humboldt wrote a preface for del Río's textbook of oryctognosy, lectured at the college, and participated in the oral examinations of senior students.

From 15 May to 9 September 1803, Humboldt traveled about México, investigating the mining industry, visiting Toltec and Aztec ruins (Fig. 47), and climbing Mexican volcanoes. When this expedition was completed, he decided that his explorations were finished, and he sold his collection of scientific instruments to the College of Mines.



Fig. 47. Teotihuacan Ruins
Mexico, 2010, Sc#2699a

On 3 January 1804, he presented to the Viceroy, José Iturrigaray, a summary of his observations, *Tablas geográficas políticas del Reino de la Nueva España*. These tables were later incorporated into Humboldt's comprehensive study of México, *Essai politique sur la Royaume de la Nouvelle Espagne* ("Political Essay on the Kingdom of New Spain"). The word "political" in the title of this book and Humboldt's book on Cuba should be read as "economic" as a modern interpretation. He did not discuss the "politics" of either country.

On 20 January 1804, Humboldt, Bonpland, and Montúfar left México City for Veracruz. Along the way Humboldt measured the altitudes of the volcanoes Iztaccíhuatl and Popocatepetl (Fig. 48), and climbed the volcano Cofre de Perote (Nauhcampatépetl). The travelers entered Veracruz and sought passage to Cuba. They sailed from Veracruz on 7 March aboard the frigate *La O*.

Second Visit to Cuba

After a month of difficult navigation, the travelers arrived in Havana, where they received a cordial reception. Humboldt made a detailed study of the Cuban sugar industry, which he described in his *Essai politique sur l'île de Cuba*. ("Political Essay on the Island of Cuba.") (Fig. 49). Observation of the use of slave labor in sugar production led Humboldt to become an outspoken enemy of the institution of slavery.

From Havana, Humboldt shipped several cases of specimens, and reports of his explorations to Paris, where the specimens were examined by French scientists, and the reports were published in scientific journals.



Fig. 46. del Río
Mexico, 1965, Sc#961



Fig. 48. Iztaccíhuatl & Popocatepetl
Mexico, 1934, Sc#C57



Fig. 49. Humboldt Bicentenary (with Surinam Eel, Night Ape, & Condor)
Cuba, 1969, Sc#1433–35

United States

Humboldt and his companions sailed from Havana on 29 April 1804, and arrived at Philadelphia on 19 May after a stormy passage. In Philadelphia, they were the guests of artist Charles Willson Peale (Fig. 50). Humboldt visited Peale's Museum of Natural History, and admired the unique exhibits. Peale painted Humboldt's portrait, (Fig. 51), which now hangs in the Mutter Museum of the College of Physicians in Philadelphia.

Peale and the travelers left Philadelphia on 26 May, and arrived in Washington on 29 May. Peale introduced Humboldt to President Jefferson (Fig. 52) in the hope of using Humboldt's influence to persuade Jefferson to obtain public funding for his museum. Jefferson was not persuaded.



Fig. 50. C.W. Peale
USA, 1955, Sc#1064



Fig. 51. Humboldt Portrait
(C.W. Peale, 1804)



Fig. 52. Jefferson (imperforate coil)
USA, 1968, Sc#1299b

Jefferson invited Humboldt and his companions to an informal dinner at the White House. Jefferson had a clever way of obtaining information from guests. He entertained them with excellent food and wine, and got them to talk about things in which he was interested. It was Jefferson's expectation that Spanish territories to the west would someday be acquired by the United States and he wanted to know all about them.

Jefferson's Corps of Discovery (the Lewis and Clark expedition) had started off from Missouri a few days earlier, on 14 May. Jefferson got Humboldt to tell him all he knew about Mexico. By the time Humboldt was finished talking, Jefferson probably knew more about the resources of Mexico than the Spanish did.

Humboldt, who loved to talk and tell everything he knew, never realized that he had been pumped. But he did scold Jefferson for keeping slaves. Otherwise, he was a great admirer of Jefferson's political ideals. Humboldt and Jefferson corresponded for the remainder of Jefferson's life.

On the next day, Humboldt and his companions visited Mount Vernon, which, only five years after George Washington's death, was already a tourist attraction. They had an exciting return trip to Washington. Their coachmen had spent the time of the visit in a nearby tavern, and, encouraged by their libations, decided to race each other to see who could get back to Washington first. Everyone got back safely, though a bit shaken.

A day later, Humboldt was a guest at the home of Treasury Secretary Albert Gallatin (Fig. 53). He gave Gallatin copies of his maps and other documents about the Spanish territories. Gallatin was very impressed by Humboldt's knowledge. He wrote, "I was really delighted, and swallowed more information of various kinds in less than two hours than I had for two years in all I had heard and read."



Fig. 53. Gallatin
USA, 1967, Sc#1279

In June, the travelers met with Secretary of State James Madison and visited artist Gilbert Charles Stuart. They also met with Dr. Benjamin Rush, professor of chemistry at the College of Philadelphia, and a signer of the Declaration of Independence.

Following his meetings with famous Americans, Humboldt concluded his exploration of the Americas. On 9 July 1804, Humboldt, Bonpland, and Montúfar sailed from Philadelphia for Europe aboard the frigate *La Favorite*.

Return to Europe

Humboldt, Bonpland, and Montúfar arrived at Bordeaux on 8 August 1804. Humboldt and Montúfar went directly to Paris. In Paris, Humboldt discovered that he was already famous. The specimens that he had sent ahead had been studied by French scientists, and his letters describing his explorations had been published.

During the fall of 1804, Humboldt collaborated with French chemist Joseph-Louis Gay-Lussac in research in the behavior of gases, resulting in the discovery of the relationship now known as Gay-Lussac's Law of Combining Volumes. (Fig. 54).

In Paris, Humboldt became acquainted with the future "Liberator" of South America, Simón Bolívar. (Fig. 55).



Fig. 54. Gay-Lussac First Day Cover
France, 1951, Sc#B260



Fig. 55. Humboldt & Bolívar
DDR, 1983, Sc#2363

Humboldt preferred to live in Paris, rather than his native Berlin, because Paris was the scientific and intellectual capital of Europe. He preferred to write his books in French because he felt it would give him a wider audience, and better sales.

Montúfar's goal in Paris was completion of his education. When the South American Spanish colonies declared independence and rebelled against Spain, Montúfar returned to

He presented the results of his explorations in lectures at the Institut de France and exhibited a collection of his sketches at the Jardin des Plantes. In December, Humboldt attended the coronation of Napoléon as Emperor. Figure 56 shows the painting of the coronation by Jacques-Louis David. Humboldt is the short man on the left of the man under the cross.



Fig. 56. "Coronation of Napoleon"
by Jacques-Louis David, 1805–07

South America to join the rebellion. The Spanish captured and executed him.

Bonpland left the other two at Bordeaux to go to La Rochelle to visit his sister. After his visit, he also returned to Paris. He presented a collection of specimens to the Museum of Natural History. The Empress Josephine appointed him superintendent of the gardens at Malmaison. At Malmaison, he planted seeds that he had brought from America.

Humboldt's Accomplishments as an Environmentalist

One of Humboldt's most extensive accomplishments was the correlation of species of plants with the environment in which they grow. Humboldt's close study of plants in each environment resulted in the discovery of previously undescribed species. He is the father of **phytogeography**, or the study of the geography of plants. His book, *The Geography of Plants in Tropic Lands*, is the first work in this field.

Humboldt's recording of air temperature and pressure, and of weather during his travels led to the development of the sciences of **meteorology** and **climatology**. He was the first to draw isobars on a map, thereby inventing the first weather map.

Humboldt observed the relationship between forests and climate, noting that forests enhanced the humidity and produced more rainfall than unforested land. He noticed that forests enhance the stability of hillsides.

He discovered the cold Antarctic current that rises off the coast of Peru, now known as the **Humboldt Current**. He showed that this nutrient-rich current supports a rich sea life, which in turn supports a major fishing industry, and the fish that feed the guano bird. The Humboldt Current is interrupted during an El Niño event, to the detriment of the Peruvian fishing industry.

Everywhere he went, Humboldt was careful to measure latitude, longitude, and altitude. His measurements resulted in more accurate maps, especially of the course of the Orinoco River.

Humboldt's books describing his explorations in Spanish America exerted a strong influence on later naturalists. Charles Darwin took a copy of the *Personal Narrative* with him on the voyage of the HMS *Beagle*. Darwin wrote, "If you would understand the Tropics, study Humboldt." The emphasis is Darwin's.

Humboldt's work influenced Henry David Thoreau (Fig. 57) in his observations of nature during his life at Walden Pond.

Humboldt's ecological observations were a strong influence on the work of the great American environmentalist John Muir (Fig. 58).



Fig. 57. Thoreau
USA, 1967, Sc#1327



Fig. 58. Muir
USA, 1964, Sc#1245

The American landscape artist Frederic Edwin Church, strongly influenced by Humboldt, went to Ecuador in 1853 and again in 1857, and lived in Quito. He painted four great pictures of scenes in the Andes, and of Ecuadorean volcanoes that were described by Humboldt (Fig. 59).

Humboldt's prolific written works assured that his findings and his views were publicized and understood by his scientific colleagues. He was the first to point out that, as John Muir said, "Everything is connected to everything else."

Other Accomplishments

At the time when Humboldt studied geology at the *Freiburg Bergakademie*, there were two competing hypotheses concerning the origin of the earth's geological formations. Abraham Werner, director of the Bergakademie, taught the **Neptunian hypothesis**, which held that the earth's rocks were sedimentary, that they were laid down by water. The Neptunian hypothesis was accepted by most geologists in continental Europe.

James Hutton, the Scottish "father of geology," had proposed the **Plutonian hypothesis**, which held that most of earth's rocks were igneous, that is, of volcanic origin. This hypothesis was accepted by most British geologists. Humboldt's study of volcanoes in South America and Mexico led him to conclude that the Neptunian hypothesis was erroneous.

Humboldt's American experiences also led to his political views. His study of the Cuban sugar industry led him to a lifelong condemnation of the institution of slavery. His interaction with Thomas Jefferson and other Americans made him a lifelong believer in democracy, as opposed to monarchy.

Humboldt has been honored by more stamps than any other scientists except Albert Einstein and Marie Curie. His iconic portrait, *Humboldt auf Orinoko*, was painted by Friederich Georg Weitsch in 1806 (Fig. 60). His face from this portrait has been used on many stamps. The flower in the picture is a cinchona, which does not grow on the Orinoco.

The Liberator of South America, Simón Bolívar, wrote that Humboldt was the "true discoverer of South America." Humboldt remains a hero in South America and in his native Germany, with many streets, parks, and organizations named for him. To Germans, Humboldt's travels are *Die Wiederentdeckung der Neuen Welt* ("The Rediscovery of the New World").

In recognition of him as a scientist, there is the Humboldt Planetarium in Caracas. The Alexander von Humboldt Stiftung (Foundation) in Bonn, Germany provides fellowships for foreign scientists to study in Germany.



Fig. 61. Humboldt Statues
DDR. 1960. Sc#522

Humboldt University had been founded as Berlin University in 1810 by Alexander's brother, Wilhelm von Humboldt, when he was Prussian minister of education. In 1947, it was renamed Humboldt University in honor of both Humboldt brothers. Statues of both Humboldt brothers stand before the University (Fig. 61).

The University in Berlin maintains a famous natural history museum (Fig. 62).

King Frederick William IV of Prussia founded the Order "Pour le Mérite" (Fig. 63) and named Humboldt its First Chancellor of the Peace Class. Among the first members of the order appointed by Humboldt were the Brothers Grimm (Fig. 64), well known for their collection of fairy tales.

In the autumn of 1834, Humboldt began his final, major opus *Kosmos: Entwurf einer physischen Weltbeschreibung* ("Cosmos: Sketch of a Physical Description of the Universe"), in which he attempted to integrate all the sciences in one major work. Figure 65 reproduces a portrait of Humboldt by Joseph Stieler, "Humboldt and his Kosmos," painted in 1843. The first volume of the *Kosmos* was published in 1845, and in the next two years, editions in English, Dutch, Danish, Italian, French, and Russian appeared.



Fig. 59. "View of Cotopaxi"
by Frederic Edwin Church, 1857



Fig. 60. "Humboldt auf Orinoko"
by Friederich Georg Weitsch, 1806



Fig. 63. Merit Order
Germanv. 1992. Sc#1746

In nineteenth century America, Humboldt was famous, and was regarded as a kind of hero-scientist. Eleven towns in the United States are named for him, as well as one each in Canada and Mexico.



Fig. 64. Brothers Grimm
Germany, 1985, Sc#1434

He was especially popular with the settlers of Nevada and northern California, each of which has a Humboldt County. Humboldt State University is located near Humboldt Bay in California.

The longest stream in Nevada is the Humboldt River. When the state of Nevada was organized, there was a strong push to call it “Humboldt.”

Humboldt’s Legacy

Humboldt died in Berlin on 6 May 1859, at the age of 89 (Fig. 66). A Prussian day of mourning was held on the day of his funeral. He was interred at Tegel beside his brother and sister-in-law. When the news of his death reached the United States, the *New York Times* devoted its entire first page to his obituary.

In all of his travels, in Europe, in the Americas, and in the Russian Empire, Humboldt recorded his observations on the plants and animals, the latitude and longitude, the altitude, the air temperature and pressure, and the weather, and he discovered the interrelationships of these observations, making him the world’s first environmentalist. He deserves to be remembered as the founder of environmental science.

Endnote: The sequence of events in Humboldt’s life presented in this article is based upon “Cronologia Humboldtiana. Datos de la Vida de Alejandro de Humboldt.” Anexo I, *Ensayo Político sobre el Reino de la Nueva España*, Fifth Edition, Juan A. Ortega y Medina, editor, Editorial Porrúa S. A., Mexico DF, 1966.



Fig. 62. Natural History Museum 100th Anniversary First Day Cover
DDR, 1990, Sc#2812–16



Fig. 65. “Humboldt and His Kosmos” First Day Cover
Berlin, 1969, Sc#9N281



Fig. 66. Humboldt
DDR, 1959, Sc#430

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Checklist of Humboldt-Related Stamps

Scott#	Denom	Subject/Description
ARGENTINA		
2008 May 24		
2483	1p	Aimé Bonpland (1773-1858) portrait
CAMBODIA		
2001 August 5 (Penguins)		
2116	900r	Humboldt Penguin, <i>Spheniscus humboldti</i>
CHILE		
1999 July 16 (Bicentennial Scientific Research in Latin America)		
1291	300p	Humboldt bust (with South American animals, mountains)
1292	360p	Humboldt portrait (with penguins, sea)
2009 July 15 (Protected Birds)		
1532	100p	Humboldt Penguin, <i>Spheniscus humboldti</i>
COLOMBIA		
1937		
444	12c	Tequendama Falls (surcharges exist)
1954 January 15 (Colombian Scenes)		
C239	5c	Galeras Volcano
C244	30c	Galeras Volcano
1958 May 12 (Intl. Geophysical Year, 1957–1958)		
680	10c	Francisco José de Caldas, “Discoverer of Hypsometry” (with hypsometer)
C309	25c	Francisco José de Caldas portrait
C310	1p	Francisco José de Caldas portrait
1960 February 12 (Centenary of Humboldt’s Death)		
713	5c	Two-toed Sloth, <i>Choloepus didactylus</i>
714	10c	Humboldt portrait
715	20c	Spider Monkey, <i>Ateles</i> sp.
C357	35c	Giant Anteater, <i>Myrmecophaga tridactyla</i>
C358	1.30p	Armadillo, <i>Dasybus</i> sp.
C359	1.45p	Parrot Fish, <i>Scarus rubroviolaceus</i>
1961 September (ovpt & surch)		
C411	5c	Sc#713 (ovpt “Aereo”)
C413	10c	Sc#715 (surch & ovpt “Aereo”)
1969 May 3 (Bicentennial of Humboldt’s Birth)		
C513	1p	Humboldt & Quindío Pass in the Andes
1976 November 10		
841	1.50p	Puracé Indians.
1982 October 21		
C730	30p	Magdalena River
1983 August 18 (Bicentennial of Royal Botanical Expedition)		
923	9p	Cinchona flowers, <i>Cinchona lancifolia</i> (Cap: <i>C. lanceifolia</i>)
924	9p	Water Lemon, <i>Passiflora laurifolia</i>
925	60p	Red Cinchona, <i>Cinchona pubescens</i> (Cap: <i>C. cordiflora</i>)
C738	12p	<i>Begonia guaduensis</i>
C739	12p	<i>Ladenbergia microcarpa</i> (Cap/Syn: <i>Cinchona ovaliflora</i>)
C740	40p	<i>Begonia urticae</i>

CUBA**1969 September 14** (Bicentennial of Humboldt's Birth)

- 1433 3c Humboldt portrait & animals described by him (with Surinam Eel)
 1434 13c Humboldt portrait & animals described by him (with Night Ape)
 1435 30c Humboldt portrait & animals described by him (with Spider Monkey)

2000 December 19 (Bicentennial of Humboldt's Visit to Cuba)

- 4118 15c Humboldt portrait & house where he stayed in Trinidad
 4119 65c Humboldt portrait & house where he stayed in Havana

2007 September 27 (Tourism: Fauna in A. v. Humboldt National Park)

- 4784a 75c Monte Iberia Eleuth Frog, *Eleutherodactylus iberia*
 4784b 75c Cuban Solenodon, *Solenodon cubanus*

2010 September 27 (Tourism: Alexander von Humboldt National Park)

- 5168 75c West Indian Manatee, *Trichechus manatus*

DOMINICA**1998 August 4** (Sea Birds)

- 2065 65c Humboldt Penguin, *Spheniscus humboldti*

ECUADOR**1909 August 10**

- 185 10c Juan Pio de Montúfar, Marqués de Selva Alegre (Humboldt's host in Quito)
 186 20c Carlos Montúfar (accompanied Humboldt back to Europe)

1956 January 2 (Ecuadoran Landmarks)

- C291 1.50s Mount Cotopaxi
 C295 2.50s Ruins of Ingapirca

1959 May 6 (Centenary of Humboldt's Death)

- C341 2s Humboldt portrait

1993 August 20 (250th anniv. Maldonado-La Condamine Expeditions)

- 1320 150s Red Cinchona, *Cinchona pubescens* (Cap: *C. cordiflora*)

2000 April 13 (Bicentennial of Relocation of Riobamba)

- 1513 8000s Mount Chimborazo

2002 June 14 (Bicentennial of Humboldt's Visit to Ecuador)

- 1571 84c Humboldt portrait

2012 September 26 (125th anniv. Ecuador-Germany Friendship)

- 2078 50c Humboldt portrait
 2079 \$2 Humboldt portrait

FRANCE**1939 April 24** (Centenary Invention of Photography)

- 374 2.25fr Niepce & Daguerre (Arago, Biot, & Humboldt report on invention to Academy of Science)

1951 June 2 (Famous Persons)

- B260 10fr+3fr Joseph-Louis Gay-Lussac (Humboldt's colleague in chemical research)

GERMANY D. R.**1950 July 10** (250th anniv. Berlin Academy of Science)

- 59 5pf Alexander von Humboldt portrait
 61 8pf Wilhelm von Humboldt portrait

1959 May 6 (Centenary of Humboldt's Death)

- 430 10pf Humboldt portrait (with Central American view)
 431 20pf Humboldt portrait (with Siberian view)

1960 November 4 (150th anniv. of Humboldt University, Berlin)

- 522 20pf Humboldt University & statues of Humboldt brothers
 523 25pf Wilhelm & Alexander von Humboldt Medal

- GERMANY D. R.** (continued) **1969 February 5** (Bicentennial of Humboldt's Birth)
 1079 25pf Daguerreotype of Humboldt
- 1970 June 23** (Humboldt University Archeology Work in Sudan)
- 1215–21 var Various archeological artifacts
- 1978 July 18** (Famous Germans)
- 1926 5pf Chemist Justus von Liebig (1803–1873)
- 1983 July 19** (Bicentennial of Bolívar's Birth)
- 2363 35pf Humboldt & Simón Bolívar portraits
- 1985 October 22** (175th anniv. Humboldt University)
- 2508 20pf Humboldt University Administration building
- 1990 April 17** (Centenary of Humboldt Univ. Natural History Museum)
- 2812–16 var Various dinosaur skeletons
- GERMANY** **1959 May 6** (Centenary of Humboldt's Death)
 800 40pf Humboldt portrait
- 1992 May 7** (150th anniv. of the Order)
- 1746 100pf The Order Pour le Mérite
- GERMANY (Berlin)** **1949** (Berlin Landmarks)
- 9N43 4pf Schloss Tegel, Humboldt estate
 9N50 25pf Schloss Tegel, Humboldt estate
 9N60 5m Schloss Tegel, Humboldt estate
- 1953** (Famous Persons)
- 9N93 40pf Wilhelm von Humboldt portrait
- 1959** (Centenary of Humboldt's Death)
- 9N155 40pf Humboldt portrait
- 1969 September 12** (Bicentennial of Humboldt's Birth)
- 9N281 50pf "Humboldt and his Cosmos" portrait by Stieler
- 1985 February 21** (150th anniv. of Wilhelm's Death)
- 9N499 80pf Wilhelm von Humboldt statue
- GRENADA** **1998 June 30** (Sea Birds)
 2761 \$1.10 Humboldt Penguin, *Spheniscus humboldti*
- 1999 May 24** (IBRA '99 World Philatelic Exhibition)
- 2863 90c *Humboldt* sailing ship (1851–66) & stamp-on-stamp
 2865 \$3 *Humboldt* sailing ship (1851–66) & stamp-on-stamp
- GUATEMALA** **2011 June 29** (Alexander von Humboldt Memorial)
 650 5q Orchid, *Phragmipedium popwii* (Syn: *P. humboldti*) (Cap: *P. humboldtii*)
- GUYANA** **2003 December 1** (Mammals)
 3800 \$60 Humboldt's Woolly Monkey, *Lagothrix lagotricha*
- LIECHTENSTEIN** **1994 March 7** (Illustrations from Humboldt's Books)
 1022 Andean Condor, *Vultur gryphus*
 1023 Brazilian Princess Flower, *Tibouchina cardinalis* (Cap/Syn: *Rhexia cardinalis*)
- MARSHALL ISLANDS** **2013 March 9** (Birds) (MS/10)
 1056h 46c Humboldt Penguin, *Spheniscus humboldti*

MEXICO**1934 September 1** (National University Issue)

C57 75c Iztaccíhuatl & Popocatepetl (volcanoes studied by Humboldt)

1960 March 16 (Centenary of Humboldt's Death)

908 40c Humboldt Statue at the Biblioteca Nacional

1965 February 18 (del Río Birth Bicentennial)

961 30c Manuel Andrés del Río portrait (friend of Humboldt)

1992 January 15 (Bicentennial of Engineering Education in Mexico)

1717 1300p Façade of the Royal College of Mines

1999 December 1 (Bicentennial of Humboldt's arrival in the Americas)

2176 3p Humboldt self-portrait

MICRONESIA**2007 August 7** (Intl. Polar Year) (MS/6)748d 75c Humboldt Penguin, *Spheniscus humboldti***MOZAMBIQUE****2009 November 30** (150th anniv. of Humboldt's Death) (MS/6 & SS/1)

Each stamp shows a portrait of Humboldt with flora or fauna he described.

1897a 33m Golden-backed Uakari, *Cacajao melanocephalus* (Cap: *Simia melanocephala*)1897b 33m *Meriania speciosa* (Cap/Syn: *Rhexia speciosa*)1897c 33m Brown-mantled Tamarin, *Saguinus fuscicollis* (Cap/Syn: *Simia leonina*)1897d 33m *Hibiscus* sp.1897e 33m Birdweed, *Convolvulus* sp.Brown Howler Monkey, *Alouatta guariba* (Cap/Syn: *Simia ursina*)1897f 33m *Melastoma* sp.

1925 SS 175m Humboldt with flora & fauna specimens

Margin UL: Humboldt portrait sketch

ML: *Cephalanthus occidentalis*LL: Butterflyweed, *Asclepias tuberosa*UR: Sweet Orange, *Citrus × sinensis*

LR: Humboldt statue

Bkgrd: "Travelers in the Andes" painting

NETHERLANDS**2001 August 21** (Sail 2000 Amsterdam Harbor) (MS/10)1054g 80c *Alexander von Humboldt* sailing ship (with green sail)**PARAGUAY****1976 August 20** (German Sailing Ships)1689 5g *Humboldt* sailing ship (1851–66)**PERU****1936–37** (Riches of Guano)356 2c Peruvian Cormorant, *Phalacrocorax bougainvillii* (the guano bird) (lt brown)

357 2c Same species (green)

360 10c Same species (crimson)

361 10c Same species (vermillion)

1970 August 6 (Tourism)

C294 3s Ruins of pre-Inca city of Chan-Chan.

1970 April 30 (Food of the Guano Bird)532 2.50s Anchovy, *Engraulis ringens***1971 July 5** (150th anniv. Independence)

C318 4s Hipólito Unanue (Humboldt's host in Lima)

1985 December 20 (Fauna)853 1500s Humboldt Penguin, *Spheniscus humboldti*

- PERU** (continued) **1986 April 5** (Restoration of Chan-Chan Ruins)
866 50c Bas-relief in pre-Inca city of Chan-Chan.
- 1988 June 2** (1st Peruvian Scientific Expedition to the Antarctic)
935 7i B.I.C. *Humboldt* Antarctic research vessel
- 2002 November 20** (Bicentennial Humboldt's Visit to Peru) (Strip/2)
1349 3.20s Humboldt portrait & B.I.C. *Humboldt* Antarctic research vessel
- 2008 February 22** (1st Peruvian Antarctic Scientific Exp., 20th anniv.)
1614a 10s B.I.C. *Humboldt* Antarctic research vessel
1614b 10s Expedition members
- ROMANIA** **1983 May 16** (Inter-European Cultural & Economic Cooperation)(MS/4)
3135b 3L Humboldt portrait
- RUSSIA** **1959 May 6** (Centenary of Humboldt's Death)
2196 40k Humboldt portrait
- SAAR** **1959 May 6** (Centenary of Humboldt's Death)
322 15fr Humboldt portrait (last stamp issued by Saar)
- SPAIN** **1973 March 21** (Flora of Canary Islands)
1747 1p Canary Laurel, *Apollonias barbujana* (Syn: *A. canariensis*)
1748 2p Firetree, *Myrica faya*
1749 4p Palms
1750 5p Holly
1751 15p Canary Islands Dragon Tree, *Dracaena draco*
- 1993 September 20** (Explorers)
2748 65p José Celestino Mutis and cinchona flower (Humboldt's host in Bogotá)
- UNITED NATIONS (Vienna)** **1993 March 2** (Endangered Species)
144 7s Humboldt Penguin, *Spheniscus humboldti*
- UNITED STATES** **1955 January 15** (150th anniv. Pennsylvania Academy of Fine Arts)
1064 3c Charles Wilson Peale and his natural history museum
- 1863**
86L1 25c Local stamp, Humboldt Express, Carson City, Nevada
- URUGUAY** **1981 February 19**
1097 2p Humboldt's self-portrait (reversed)
- VENEZUELA** **1960 February 9** (Centenary of Humboldt's Death)
743–45 var Humboldt portrait
C709–11 var Humboldt portrait
- 1969 January 24** (Tourism) (SS/2)
C1007 30c Hotel Humboldt, Federal District
- 1969 September 12** (Bicentennial of Humboldt's Birth)
C1012 50c Humboldt portrait by Stieler
- 1970 July 29** (Flora)
964 20c Pink Princess (triana), *Monochaetum humboldtianum*
- 1973** (10th anniv. Humboldt Planetarium) (Set/15)
1016–30 var Sun & Solar System planets

- VENEZUELA** (continued) **1982 January 21** (50th anniv. Venezuelan Natural Science Society)
- 1257 2b Guácharo Cave
- 1982 October 14** (Flora & Fauna)
- 1267 1.05b Aloe (maguey), *Fourcroya humboldtiana*
- 1270 3b Guácharo bird (oilbird), *Steatornis caripensis*
- 1992 June 12** (Nature Protection: Turtles) (WWF) (Block/4)
- 1471 12b Endangered turtle species
- 1996 October 11** (Native Aborigines) (MS/10)
- 1541 80b Native peoples of Venezuela
- 2000 September 26** (2nd OPEC Head of State Summit) (MS/10)
- 1616g 400b Humboldt Peak

WHAT TO DO WITH EXTRA STAMPS

ATA member Jim VanderPlaat from Cottage Grove, Oregon, recently provided a document with examples of several ideas for using all those extra stamps that we collectors seem to accumulate. These include donating them to various charities and schools and using them for craft and other projects.

Jim's club, the Greater Eugene Stamp Society, prepares boxes of donations to "Stamps for the Wounded," a service activity of Lions Clubs (SFTW, P.O. Box 297, Dunn Loring, VA 22041). They want unsorted on-paper stamps, but will also accept mint stamps, collecting supplies, and cash donations.

There are other groups that also accept donated extra stamps. Many large stamp shows have a Youth Activities program that can use stamps for their projects. Often these organizations are non-profit and can provide the donor with a receipt for tax deduction purposes.

One interesting project that Jim came up with is to use those extra stamps to make bookmarks. These make nice gifts for holidays, birthdays, anniversaries, and other occasions. You can pick a theme that fits the occasion or the recipient. You could also use them for prizes at your club, show, or other event.



The initial investment is a laminator and pouches that enable you to laminate whatever you want. Here is a list of the materials needed, all of which you can find at craft stores, or retailers such as Walmart: Laminator (8½×11) (\$19.95), Pouches (50ea 8½×11) (\$22.50). Pouches also come in packages with various other sizes.

You can make 12–14 bookmarks with one 8½×11 sheet depending on the stamp sizes you use. You will also need colored paper, glue or hinges, and scissors.

Arrange and attach the selected stamps in rows on both sides of the paper. Place the paper inside the pouch and run it through the laminator. Then cut the laminated paper into strips of the desired size. These bookmarks easily lend themselves to topical designs. The example above shows one using Fruit as its theme.