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## Amphibian Stamps Issued by the National Wildlife Federation (1941–1995)

Postage stamps, those odd, serrated, sticky-backed pieces of paper stuck to envelopes and packages enabling delivery to far corners of the world, have served as a medium for advertisement and propaganda for more than a century. Stamps have also proved of value in transmitting educational information on a variety of topics (Kirman and Jackson 2000; Calver et al. 2011), both within and outside of formal classroom settings. An environmental message has been a common theme for the world's postal agencies, thus bringing public awareness to a variety of issues, from the protection of wilderness areas and wetlands to water management, species conservation, and climate change (Ramanujam 2016; Yeung 2018; Das and Gee 2022). Stamps (also referred to as seals and labels in the field of philately) have been issued by a variety of other organizations, including suppliers of goods and services and non-governmental agencies, where they have served as sources of revenue and advertisement (Cohen and Altman 2021). For instance, the “duck stamps” of the U.S. Fish and Wildlife Service (USFWS), which were issued after the enactment of the Migratory Bird Hunting Stamp Act on 1 July 1934, have earned the USFWS substantial sums annually through their sale to hunting-permit holders and collectors of such seals (Sater 1947). Funds thus raised have been used in land acquisition, refuge development, and for refuge maintenance and operation.

Initially named the General Wildlife Federation (for the first two years of its existence), the National Wildlife Federation (NWF), currently headquartered at Reston, Virginia, USA, was established in 1936 (Allen 1987). Its original intention was to unite sportsmen, outdoor enthusiasts, and conservationists. Currently, the Federation has representations in all U.S. states, and has, over the years, been successful in reaching many grassroots stakeholders.

The role of amphibians in highlighting conservation concerns has been significant. The amphibian motif often has been used as a medium to advertise products (e.g., Hödl 2000; Das 2020a, 2021) and, from a broad conservation perspective, amphibians can act as a surrogate for an appreciation of biological diversity (Ilg and Oertli 2016). As examples, personalized stamps featuring

frogs have been issued commemorating the Calaveras County Fair & Jumping Frog Jubilee event in California, USA (Drummond 2016) and for the International Bornean Frog Race in Sarawak, Malaysia (Das 2020b). In this essay, I review frog and salamander stamps issued under the wildlife series of seals by the National Wildlife Federation.

The NWF stamp series was inspired by the ‘duck’ stamps. The early issues were designed by the same individual, Jay Norwood Darling (1876–1962) referred to as “Ding Darling” by the press, an editorial cartoonist and conservationist (Sterling et al. 1997). Darling was the winner of two Pulitzer Prizes, and notably was a friend of another famous cartoonist, Walt Disney (1901–1966). In fact, one of the first issues in 1938 featured a design previously used as a duck stamp in 1934. Stamps were issued in gummed sheets. Besides the anticipated annual issues, there were two more series (see Mosbaugh and Hoyer 1979)—the Spring Issues (such as the 1959 “Baby Animal Stamps” and the 1992 “These Stamps Can Help Protect America’s Vital Wetlands”), that have at least once issued amphibian seals, while the famous ‘Christmas Seals’ (Cotton 2009) issued over the year-end holidays, predictably did not feature amphibians. Between 1941 and 1995, a total of 44 seals were issued by NWF that featured amphibians (Table 1). These included 19 species of frogs and 11 species of salamanders. In total, 32 stamps featured frogs and 13 depicted salamanders (see Fig. 1 for examples).

In the following, observations are made on NWF stamps/seals spanning the period 1941 to 1995 (Fig. 1) that were acquired through commercial purchase. Authenticity was determined through an examination of official NWF resources, as far as possible. Dimensions refer to the width and height of the printed image (minus text) on each stamp. Perforation counts were made per 2 cm measured using an Instanta Stanley Gibbons Perforation Gauge to the nearest 0.5 perforation. Scientific nomenclature of species follows Frost (2021). IUCN Red List status follows IUCN (2021).

Artists invited to design the Federation’s stamps have, from the beginning, been among the leading wildlife artists of the day. Thus, the 1940s decade saw the mastery of Franklin Booth and Walter Webber, while Roger Tory Peterson and Michael Bevans dominated the 1950s. The works of recent masters, including Charles Ripper and Bruce Holloway, were used in the 1990s. Artists of several seals, such as the 1988 American Bullfrog and 1992 Wyoming Toad remain uncredited. A 1978 issue showing a pair of Pine Barrens Treefrogs that was signed ‘Estey’ may be

### INDRANEIL DAS

*Institute of Biodiversity and Environmental Conservation,  
Universiti Malaysia Sarawak, 94300, Kota Samarahan, Sarawak,  
Malaysia; e-mail: idas@unimas.my*

TABLE 1. List of seals issued by the National Wildlife Federation, USA, showing amphibian species, Nomenclature follows Frost (2021). Abbreviations of IUCN Red List Threat Status (IUCN 2021): EN = Endangered; EW = Extinct in the Wild; LC = Least Concern; NE = Not Evaluated; NT = Near Threatened. Dimensions refer to printed image size (width × height; in mm) within a stamp, that may have additional text outside the frame and its orientation, horizontal (H) or vertical (V) is shown in parenthesis. Perforations (P) refer to perforations per 2 cm. Position in original sheet indicated using column (C) and row (R) numbers. Sheet headers correspond to: 1 = Fourth Annual National Wildlife Conservation Stamps; 2 = Fifth Annual National Wildlife Conservation Stamps; 3 = Eighth Annual National Wildlife Conservation Stamps; 4 = Ninth Annual National Wildlife Conservation Stamps; 5 = Tenth Annual 1947 National Wildlife Conservation Stamps; 6 = National Wildlife Conservation Stamps 1969; 7 = Fifteenth Annual Issue National Wildlife Conservation Stamps; 8 = Wildlife Stamps; 9 = Baby Animal Stamps; 10 = National Wildlife Conservation Stamps; 11 = National Wildlife Conservation Stamps 1981; 16 = National Wildlife Federation's 1982 Conservation Stamps; 17 = National Wildlife Federation's 1983 Conservation Stamps; 18 = America's 1984 Conservation Stamps; 19 = America's 1985 Conservation Stamps; 20 = America's 1987 Conservation Stamps; 21 = America's 1989 Conservation Stamps; 22 = America's 1989 Conservation Stamps; 23 = These Stamps Can Help Protect America's Vital Wetlands; 24 = Use America's Conservation Stamps.

Sl/Sheet No.	Year	Species	Artist	IUCN status	Dimensions	Perforations	Imperforate edge	Position	Sheet header	Seals per sheetlet
1	1941	American Bullfrog ( <i>Lithobates catesbeianus</i> )	Franklin Booth	LC	50.5 × 70.0 (H)	P-12.5	-	C1, R2; C5, R2	1	20
2	1942	Gray Treefrog ( <i>Dryophytes versicolor</i> )	Franklin Booth	LC	50.0 × 33.0 (H)	P-12.5	-	C1, R3; C5, R3	2	36
3	1942	American Toad ( <i>Anaxyrus americanus</i> )	Franklin Booth	LC	60.2 × 33.2 (H)	P-12.5	-	C4, R7; C8, R7	2	36
4	1945	Northern Leopard Frog ( <i>Lithobates pipiens</i> )	Walter A. Weber	LC	50.0 × 33.3 (H)	P-12.5	-	C4, R4; C8, R4	3	56
5	1945	Eastern Newt ( <i>Notophthalmus viridescens</i> )	Francis Lee Jaques	LC	60.8 × 69.9 (V)	P-12.5	-	C1, R7	3	56
6	1946	Green Frog ( <i>Lithobates clamitans</i> )	Walter A. Weber	LC	50.6 × 33.1 (H)	P-12.5	-	C1, R7	4	64
7	1947	"Spadefoot Toad" (Scaphiropodidae; possibly <i>Spea</i> sp.)	Walter A. Weber	NE	50.5 × 33.0 (H)	P-12.5	-	C4, R4; C8, R4	5	64
8	1951	Wood Frog ( <i>Lithobates sylvaticus</i> )	Roger T. Peterson	LC	55.7 × 36.7 (H)	P-12.5	-	C6, R3	6	36
9	1952	American Green Treefrog ( <i>Dryophytes cinereus</i> )	Roger T. Peterson	LC	55.2 × 36.4 (H)	P-12.5	-	C4, R5	7	36
10	1954	Pine Barrens Treefrog ( <i>Dryophytes andersonii</i> )	Michael Bevans	NT	55.0 × 36.2 (H)	P-12.5	-	C1, R4	6	36
11	1955	Fowler's Toad ( <i>Anaxyrus fowleri</i> )	Michael Bevans	LC	54.8 × 79.0 (V)	P-12.5	-	C4, R6 (Version 1) C4, R1 (Version 2)	8	36
12	1959	American Toad ( <i>Anaxyrus americanus</i> )	Al Kreml	LC	30.7 × 21.5 (H)	P-12.5	-	C1, R4; C2, R3; C3, R2; C4, R1; C5, R5; C6, R4; C7, R3; C8, R2; C9, R1; C10, R5	9	36
13	1968	Spring Peeper ( <i>Pseudacris crucifer</i> )	Lois & Louis Darling	LC	55.4 × 36.8 (H)	P-12.5	-	C2, R3	10	36
14	1969	Southern Leopard Frog ( <i>Lithobates sphenoccephalus</i> )	Charles Fracé	LC	55.5 × 36.0 (H)	P-12.5	-	C3, R5	11	40
15	1970	American Toad ( <i>Anaxyrus americanus</i> )	Charles Fracé	LC	55.0 × 36.4 (H)	P-12.5	-	C2, R3	10	36
16	1971	Pickrel Frog ( <i>Lithobates palustris</i> )	Charles Fracé	LC	55.0 × 36.2 (H)	P-12.5	-	C5, R3	10	36
17	1972	Spotted Salamander ( <i>Ambystoma maculatum</i> )	Lois & Louis Darling	LC	55.5 × 36.4 (H)	P-12.5	-	C3, R3	10	36
18	1973	Fowler's Toad ( <i>Anaxyrus fowleri</i> )	Charles Fracé	LC	55.0 × 36.4 (H)	P-12.5	-	C2, R3	10	36
19 / E1501	1975	American Toad ( <i>Anaxyrus americanus</i> )	Charles L. Ripper	LC	48.5 × 30.5 (H)	P-12.5	-	C4, R4	10	36
20 / E1701	1977	Ornate Chorus Frog ( <i>Pseudacris ornata</i> )	Charles L. Ripper	LC	44.3 × 27.5 (H)	P-12.5	-	C5, R2	12	36
21 / E1701	1977	Marbled Salamander ( <i>Ambystoma opacum</i> )	Bruce Holloway	LC	44.3 × 27.3 (H)	P-12.5	-	C2, R5	12	36
22 / E1801	1978	Pine Barrens Tree Frog ( <i>Dryophytes andersonii</i> )	"Estey"	NT	48.6 × 30.4 (H)	P-12.5	-	C3, R5	13	36
23 / E1001	1980	Eastern Tiger Salamander ( <i>Ambystoma tigrinum</i> )	Bruce Holloway	LC	41.2 × 26.0 (H)	P-12.5	-	C3, R7	14	36
24 / E1101	1981	Southern Leopard Frog ( <i>Lithobates sphenoccephalus</i> )	Bruce Holloway	LC	41.2 × 60.2 (H)	P-12.5	-	C3, R7	15	36
25 / E1101	1981	Yonahlossee Salamander ( <i>Plethodon yonahlossee</i> )	Bruce Holloway	LC	41.7 × 23.9 (H)	P-12.5	-	C4, R8	15	36
26 / E1201	1982	Spotted Salamander ( <i>Ambystoma maculatum</i> )	Paul C. Connor	LC	41.1 × 25.8 (H)	P-12.5	-	C3, R5	16	36
27 / E1301	1983	Cuban Treefrog ( <i>Osteopilus septentrionalis</i> )	Charles L. Ripper	LC	39.4 × 23.4 (H)	P-13	-	C2, R2	17	36
28 / E1401	1984	Barking Treefrog ( <i>Dryophytes gratus</i> )	Paul C. Connor	LC	39.9 × 23.4 (H)	P-13	Bottom	C4, R9	18	36
29 / 01E15	1985	Southern Leopard Frog ( <i>Lithobates sphenoccephalus</i> )	Murrell Butler	LC	39.5 × 23.2 (H)	P-13	-	C3, R6	19	36
30 / E1601	1986	Gray Treefrog ( <i>Dryophytes versicolor</i> )	Steven Shachter	LC	39.4 × 57.4 (V)	P-13	Left	C1, R7	-	36

Michael E. Estey, former staff of South Dakota State University, who was affiliated with the USFWS.

Each of the aforementioned seals were issued in gummed, perforated sheets, along with a variety of plant and animal species under the NWF's annual stamp issue program. Early (pre-1980s) sheet designs included stamps of multiple sizes, including several rows of large stamps (the "jumbo seals" of dealers) typically at the top and bottom of the sheet, and a broad, often illustrated header containing the title and further information on the program. Most stamps were perforated on all four sides, except for those situated on the edges of the sheet (e.g., Barking Treefrog [bottom and right]; Gray Treefrog, 1986 [left]; Hellbender 1989 [left]; Houston Toad, 1990 [bottom]; Texas Blind Salamander [bottom]) that have imperforate side(s). Dates printed on some stamps (e.g., the Yonahlossee Salamander and Southern Leopard Frog, both signed 1980 by the artist) are on a few occasions a year before the official year of release, as indicated on the top of the stamp sheet, and appear to refer to the date the artwork rather than issue date. Since 1974, sheetlets are numbered, prefixed 'E', the numbers printed on the top of each sheet. Printing flaws are numerous, particularly in earlier issues, probably from the equipment used in the production of the seals. Notable among these are printing shifts where the image is not centered, which makes them potentially valuable in case of genuine philatelic material. Printing shifts, for instance, in two of my 1945 Northern Leopard Frog stamps show an example where it is shifted to the top, and one, to the bottom. Examples of printing shifts are encountered in the 1942 Gray Treefrog (to left), 1945 Northern Leopard Frog 1945 (as mentioned), 1955 Fowler's Toad (to the right), 1968 Spring Peeper (to the left), 1970 American Toad (to the right), and 1972 Spotted Salamander (to the left). In addition, I am aware of two design variations of the sheet issued in 1955.

Individual sheets contain 18 to 64 stamps that were typically unique, although a few showed multiples of the same design. The largest sheet may have been one from 1938 by General Wildlife Federation, precursor of the NWF, which has 100 stamps of 20 designs. It was issued to commemorate the National Wildlife Restoration Week. During the height of the issuance period, between 1950 to 1992, most issues were 36-stamps per sheet.

All except two stamps (the 1992 seal that shows both the American Bullfrog and the Red-spotted Newt and the 1959 issue showing the American Toad in an apparent showdown with a Striped Skunk, *Mephitis mephitis*) depict a single species. Further, all except three (the 1954 Pine Barren Treefrog, the 1955 Fowler's Toad, and the 1978 Pine Barrens Treefrog, where two individuals are depicted) show a single individual. Images tend to fill the central frame, depicted in watercolor, and show each species in its natural habitat. Natural behavior featured calling frogs (an American Toad in 1970, Pine Barrens Treefrogs in 1978, Fowler's Toad in 1955, and Spring Peeper in 1968).

The production design for the series has changed over time, including details such as name of painter or even the NWF name. Stamp formats are mostly horizontal (N = 40 [91%]; only five are vertical) and include a central image, 24 of which bear additional text in large font on two or four sides. The first text is from a 1975 release, with the words "NATIONAL WILDLIFE FEDERATION" (on top), the common (English) species name (on bottom), and an additional slogan left and right of the image, "LEARN ABOUT WILDLIFE" / "WILDLIFE NEEDS YOU" / "BE A CONSERVATIONIST;" the slogans changed over the years to "CONSERVE WILDLIFE / BE A CONSERVATIONIST" (from 1980

TABLE 1. Continued.

S/Sheet No.	Year	Species	Artist	IUCN status	Dimensions	Perforations	Imperforate edge	Position	Sheet header	Seals per sheetlet
31 / E1701	1987	Large Blotched Salamander ( <i>Desmognathus scholzei</i> Klauber)	Paul C. Connor	LC	39.4 × 27.7 (H)	P-13	-	C2, R8	20	36
32 / E1801	1988	American Bullfrog ( <i>Lithobates catesbeianus</i> )	Unsigned <sup>1</sup>	LC	42.7 × 26.9 (H)	P-14	-	C2, R2	21	50
33 / E1901	1989	Hellbender ( <i>Cryptobranchius alleganiensis</i> )	Bruce Holloway	NT	39.6 × 23.3 (H)	P-13	Left	C1, R8	22	36
34 / E1001	1990	Houston Toad ( <i>Anaxyrus houstonensis</i> )	Charles L. Ripper	EN	39.6 × 23.1 (H)	P-13	Bottom	C3, R9	21	36
35 / E1101	1991	Pine Barrens Treefrog ( <i>Dryophytes andersonii</i> )	Bruce Holloway	NT	23.0 × 39.7 (H)	P-13	-	C2, R4	21	36
36 / E1101	1991	Two-lined Salamander ( <i>Eurycea bislineata</i> )	Bruce Holloway	LC	39.2 × 22.9 (H)	P-13.5	-	C3, R9	21	36
37 / E1201	1992	Wyoming Toad ( <i>Anaxyrus boylei</i> )	Unsigned	EW	39.2 × 22.9 (H)	P-13	-	C2, R10	21	36
38 / E1201	1992	Texas Blind Salamander ( <i>Eurycea rathbuni</i> )	Illegible	VU	40.0 × 23.0 (H)	P-14	Bottom	C3, R12	21	36
39 / E3202	1992	American Bullfrog ( <i>Lithobates catesbeianus</i> ) and Eastern Newt ( <i>Notophthalmus viridescens</i> )	Unsigned <sup>2</sup>	LC	20.0 × 26.7 (V)	P-14	-	C1, R1+R4; C3, R2+R5	23	30
40 / E1313	1993	American Bullfrog ( <i>Lithobates catesbeianus</i> )	Bruce Holloway	LC	39.4 × 22.9 (H)	P-14	Bottom	C5, R3	24	30
41 / E1313	1993	Cave Salamander ( <i>Eurycea lucifuga</i> )	Paul C. Connor	LC	39.6 × 23.2 (H)	P-14	-	C2, R6	24	30
42 / E3322	1994	Mexican Burrowing Toad ( <i>Rhinophrynus dorsalis</i> )	Bruce Holloway	LC	39.0 × 22.5 (H)	P-12	-	C3, R3	24	18
43 / E2501	1995	Red-bellied Newt ( <i>Taricha rivularis</i> )	Bruce Holloway	LC	39.6 × 22.5 (H)	P-14	-	C2, R4+R10	24	36
44 / E2501	1995	Pine Barrens Treefrog ( <i>Dryophytes andersonii</i> )	Paul C. Connor	NT	39.6 × 22.0 (H)	P-14	-	C2, R5+R11	24	36

<sup>1</sup>Based on No. 1, by Franklin Booth

<sup>2</sup>Adjacent left and right stamps signed "Ripper" (presumably Charles L. Ripper)



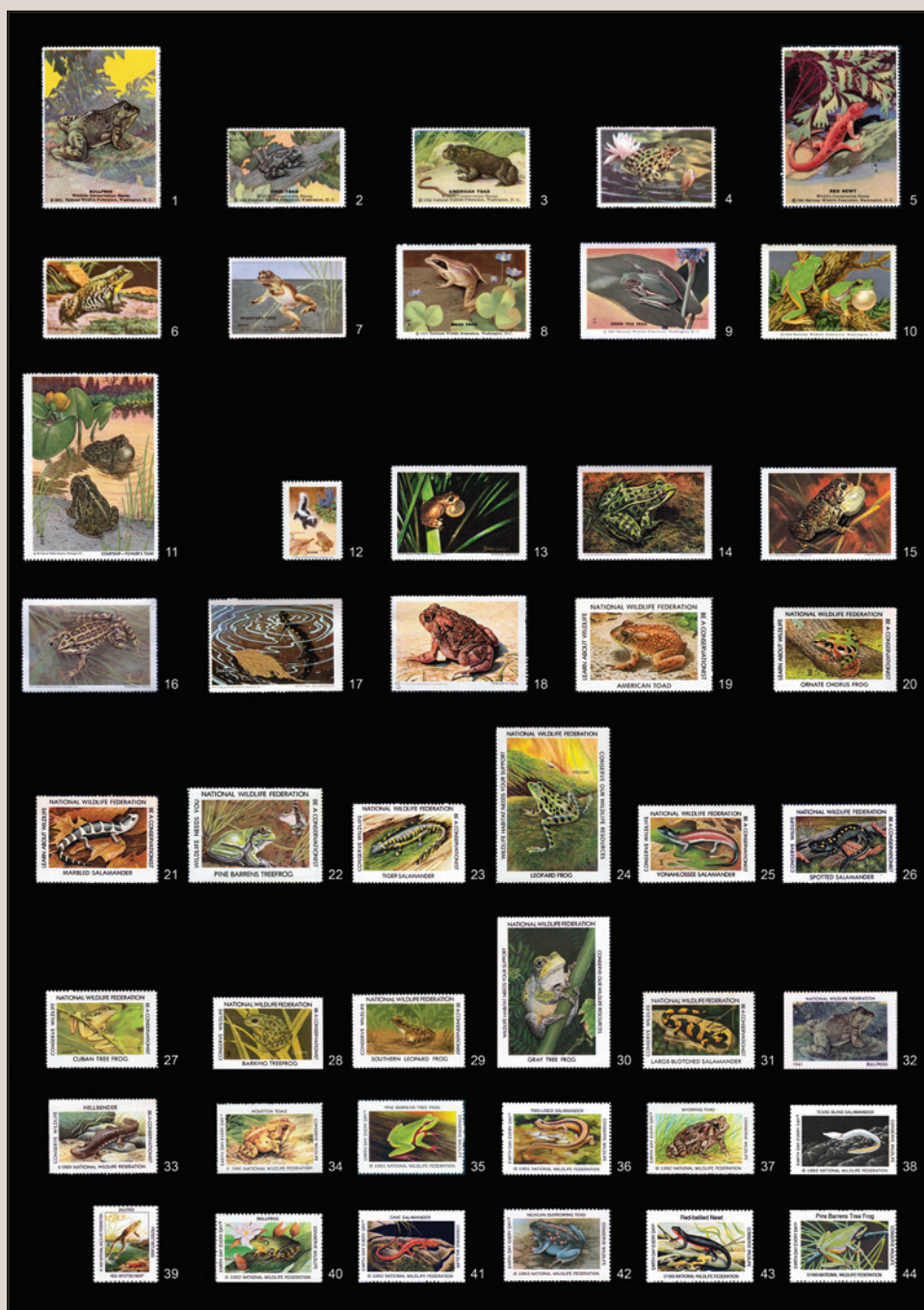


FIG. 1. Stamps depicting amphibians issued by the National Wildlife Federation, 1941–1995: 1. American Bullfrog (*Lithobates catesbeianus*); 2. Gray Treefrog (*Dryophytes versicolor*); 3. American Toad (*Anaxyrus americanus*); 4. Northern Leopard Frog (*Lithobates pipiens*); 5. Eastern Newt (*Notophthalmus viridescens*); 6. Green Frog (*Lithobates clamitans*); 7. “Spadefoot Toad” (Scaphiropodidae; possibly *Spea* sp.); 8. Wood Frog (*Lithobates sylvaticus*); 9. American Green Treefrog (*Dryophytes cinereus*); 10. Pine Barren Treefrog (*Dryophytes andersonii*); 11. Fowler’s Toad (*Anaxyrus fowleri*); 12. American Toad (*Anaxyrus americanus*); 13. Spring Peeper (*Pseudacris crucifer*); 14. Southern Leopard Frog (*Lithobates sphenoccephalus*); 15. American Toad (*Anaxyrus americanus*); 16. Pickerel Frog (*Lithobates palustris*); 17. Spotted Salamander (*Ambystoma maculatum*); 18. Fowler’s Toad (*Anaxyrus fowleri*); 19. American Toad (*Anaxyrus americanus*); 20. Ornate Chorus Frog (*Pseudacris ornata*); 21. Marbled Salamander (*Ambystoma opacum*); 22. Pine Barrens Treefrog (*Dryophytes andersonii*); 23. Eastern Tiger Salamander (*Ambystoma tigrinum*); 24. Southern Leopard Frog (*Lithobates sphenoccephalus*); 25. Yonahlossee Salamander (*Plethodon yonahlossee*); 26. Spotted Salamander (*Ambystoma maculatum*); 27. Cuban Treefrog (*Osteopilus septentrionalis*); 28. Barking Treefrog (*Dryophytes gratio-sus*); 29. Southern Leopard Frog (*Lithobates sphenoccephalus*); 30. Gray Treefrog (*Dryophytes versicolor*); 31. Large Blotched Salamander (*Ensatina eschscholtzii klauberi*); 32. American Bullfrog (*Lithobates catesbeianus*); 33. Hellbender (*Cryptobranchius alleganiensis*); 34. Houston Toad (*Anaxyrus houstonensis*); 35. Pine Barrens Treefrog (*Dryophytes andersonii*); 36. Two-lined Salamander (*Eurycea bislineata*); 37. Wyoming Toad (*Anaxyrus baxteri*); 38. Texas Blind Salamander (*Eurycea rathbuni*); 39. American Bullfrog (*Lithobates catesbeianus*) and Eastern Newt (*Notophthalmus viridescens*); 40. American Bullfrog (*Lithobates catesbeianus*); 41. Cave Salamander (*Eurycea lucifuga*); 42. Mexican Burrowing Toad (*Rhinophrynus dorsalis*); 43. Red-bellied Newt (*Taricha rivularis*); 44. Pine Barrens Treefrog (*Dryophytes andersonii*).

onwards) and “EARTH DAY EVERY DAY” (from 1990 onwards). The earlier issues have the year, name of agency (“National Wildlife Federation”) and place of issue (“Washington, D.C.”) along with the common name of the species at the bottom of the frame or on the lower part of frame in microtext. In 1992, the US National Wildlife Federation had a joint issue with the Fédération Canadienne de la Faune (the Canadian Wildlife Federation), emphasizing wetland wildlife. The U.S. sheet was under the sheet header “These Stamps Can Help Protect America’s Vital Wetlands” and “Des trésors à conserver et pour ce faire, nous avons besoin de votre aide” (loosely translated from French, “Treasures to keep and to do this, we need your help”) for the Canadian one. Dimensions, perforation, orientation and other technical details of the seals are in Table 1.

Species coverage (rarity versus commonness) on the seals is worthy of comment. Species selected were typically (24 of 39, 83% of recognizable species) among the more abundant North American species (IUCN Red List category of ‘Least Concern’). Near Threatened species occur twice (7%), as did species classified under higher threat categories (Endangered or Extinct in the Wild). These latter species are represented only in more recent times, a situation that may reflect the limited knowledge of species’ status in the middle of the 20<sup>th</sup> Century and/or attempt to publicize only the more familiar species. The most commonly depicted species are the American Toad and the American Bullfrog (four appearances each), demonstrating a bias towards commonness and familiarity over rarity. The depiction of several species of conservation importance is significant, including the Vulnerable Texas Blind Salamander (in 1992), the Endangered Houston Toad (in 1990), and the Extinct in the Wild Wyoming Toad (in 1992).

Species are identified using common names, and no attempts were made to arrive at an identification using scientific (binomial) nomenclature. A majority of species can be identified without difficulty. However, doubts persist on the identification of frogs issued on seals in the years 1945 and 1980, identified at the time as Northern Leopard Frog, *Lithobates pipiens*. These frogs have, in more recent years, been shown to be members of a species complex, with no fewer than two dozen biological species (Hillis 1988; Feinberg et al. 2014).

Another problematic identification centers around an issue from 1947, showing what is undoubtedly a member of the family Scaphiropodidae, and identified as “Spadefoot Toad.” Currently, seven species are recognized in this family in North America (*Scaphiopus*: three species; *Spea*: four species). The pale coloration and presence of a wedge-shaped metatarsal tubercle allows one to allocate it tentatively to the latter genus, but a specific allocation is not possible (C. K. Dodd, Jr., pers. comm.).

The NWF’s long-running (1938–1996) annual series of seals has done much to increase public awareness of a variety of environmental topics and themes, including North American amphibians. It is not documented why the once popular series came to an end, with the last issue in 1996. After nearly six decades of issue without break, even during World War II, the last sheet was much reduced in size. It may be that the Federation considered it more effective to move to other areas of conservation awareness, including digital strategies. It is perhaps not a coincidence that the period also saw the rise of the internet (Castells 2014), a driver of major changes in societal behavior. The beauty of the stamps can be credited to the skills of the artists, the leading painters of the time being recruited for the purpose; in an age of monochrome, the impact of full

color printing must have been significant. Such common-place objects make the transmission of ideas and awareness available to the broadest of audiences, and the NWF series of seals, over the years of its existence, has doubtless helped in the dissemination of environmental conservation to a wide audience for over half a century.

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## SSAR's Program For Pre-College Students

SSAR, founded in 1958 (originally as The Ohio Herpetological Society) by high school students Kraig Adler and David Dennis, has always welcomed all persons interested in amphibians and reptiles—amateurs and professionals, budding and seasoned herpetologists alike. The membership today, which is international, includes individuals working at colleges and universities, nature centers and zoos, museums, state and federal agencies, conservation and other NGOs, and those not working in herpetology at all, but who have an interest in amphibians and reptiles. Historically, SSAR has had programs to support college students, graduate students, and postdoctoral fellows to attend its meetings, but until recently had not recognized the interests of highly motivated high school students. As part of the all-inclusiveness of SSAR, increasing efforts have been made in the past decade to focus time, energy, and resources on budding herpetologists. The Weinkle Family Endowment for Pre-College Scholars—which provided the initial endowment to support an academic year on-line program for high school students and funding for some of them to attend the annual SSAR meeting—is yet another example of SSAR's commitment to the field of herpetology and the next generation of herpetologists.

### THE BEGINNINGS

The seeds of an SSAR program to support pre-college students interested in herpetology were planted at the 2010 Joint Meeting of Ichthyologists and Herpetologists (JMIH) event in Providence, Rhode Island, USA. A 12-year-old snake enthusiast named Justin L. Lee had been mentored by Roy McDiarmid and George Zug at the Smithsonian Institution. Justin knew he wanted to be a herpetologist. Roy suggested that he might benefit from attending the annual JMIH to see what professional herpetology is all about. Justin and his mother showed up at the Rhode Island Convention Center and asked the staffer at the JMIH registration desk if they could have their registration waived to attend for

just one day. The answer was no. SSAR officers, learning about this incident, paid for a one-day registration for this budding herpetologist and his mother, and the rest is history. For the next few years, SSAR informally paid the meeting registration costs for several pre-college students but there was no special program for them.

In 2015, two students received an SSAR-funded pre-baccalaureate sponsorship to attend the stand-alone SSAR meeting at the University of Kansas (Preest 2015): Justin Lee (by this time, 17 years old) and Eli Haines-Eitzen (15 years old), a high school student and long-time member of the undergraduate Cornell Herpetological Society (Fig. 1). Kraig Adler, who was SSAR's official liaison for the meeting, arranged a one-off program for them as a trial for establishment of a pre-college program. The two boys fully immersed themselves in the meeting activities, attended the scientific sessions and social gatherings, went on a local field trip, and participated in the Herp Quiz (they won first place in the team competition for students!). After the KU meeting, Justin and Eli wrote a joint



PHOTO BY ROBERT W. HANSEN

FIG. 1. Two budding herpetologists participated in a trial run of the pre-college program before it was officially started. Justin Lee (left; 17-year-old high school student from New Jersey) and Eli Haines-Eitzen (right; 15, a high schooler from New York) were invited to the SSAR meeting at the University of Kansas in 2015. They participated in many events including a field trip and the Herp Quiz, and afterwards wrote a joint letter to Society president Aaron Bauer describing the value of their meeting experiences. This letter was critical in attracting donors for the endowment that now supports the program.

### MARTHA L. CRUMP\*

Department of Biology, Utah State University, Logan, Utah 84322, USA

### MICHAEL SKIBSTED

1055 S Lumpkin Street, Athens, Georgia 30609, USA

### JOHN C. MAERZ

Warnell School of Forestry and Natural Resources, University of Georgia, Athens, Georgia 30602, USA

\*Corresponding author; e-mail: [marty.crump@nau.edu](mailto:marty.crump@nau.edu)