Remembering Dr. Arthur (rane Risser, Part III

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Editor's note: This is the third and final part of our series on Dr. Arthur Crane Risser. Previous installments can be found in Watchbird issues 37-1 and 36-4.

n his 17 years as the San Diego Zoo's general manager, followed by three years as director of Animal Collections for both parks, until his retirement in 2006, Art Risser had far more to concern him than the bird collection. He certainly continued to play a pivotal role in aviculture. However, his focus shifted from day-to-day management of the zoo's birds to aviculture in the service of international conservation.

He became increasingly involved in the Zoological Society's programs with the People's Republic of China. Of course, the exchanges of animals with Chinese zoos resulted not only in the aforementioned genetic refreshment of U.S. pheasant bloodlines, as well as founders for the now flourishing American populations of Red-crowned Cranes, but a wide variety of mammals as well. The presence of Sichuan Takins, Chinese Gray Gorals, Tufted Deer, and Francois Langurs in American zoos is the result of San Diego's overtures. Art's style and charm served the Zoological Society well in China. And his diplomacy is credited by his colleagues involved with the Giant Panda Conservation Foundation as being

a crucial component in the agreements by which Pandas can now be seen in San Diego, Memphis, Atlanta and Washington D.C., with U.S.-born cubs joining the Chinese captive population. Under David Rimlinger, ornithological and avicultural research in China continues, including fieldwork with tragopans and Chinese Monals (Bell, 1995).

The Zoological Society of San Diego's international conservation programs have long focused on island endemics. During Art's tenure, several crucial and now very promising projects were initiated. Alan Lieberman, who commenced work at the San Diego Zoo in 1973, and served as Assistant Curator to Art, then succeeded him, was, with his wife, Cyndi Kuehler, in charge of the Society's Hawaiian Endangered Bird Conservation Program (Warden, 2006) from 1993 until 2000. He continues to oversee it, along with a variety of other programs, in his capacity as director of field programs for the society. In a tribute at Art's memorial service, Alan attributed the continued existence of the Hawaiian Crow or 'Alala (Corvus hawaiiensis), to Art's foresight in funding and supporting this work (Kuehler & Lieberman, 1994). Techniques developed and refined at the Avian Propagation Center were applied to rearing young crows taken from the last wild nests, initially to augment the

wild population, then to create an in situ captive population of more than 50 birds (from a low of around a dozen in 1993). Since 2002, this species has existed only in captivity. Other critically endangered Hawaiian passerines have benefited profoundly from this program. Since its discovery in 1891, the Puaiohi, or Small Kaua'i Thrush (Myadestes palmeri) has always been very rare, and at least since the 1970's has numbered in the low hundreds. Eggs were collected in 1996 and 1997. The resulting chicks produced more than 200 captive-bred offspring, and more than 100 have been returned to the wild (Lindholm, 2008, Warden, 2006). Very little meaningful aviculture had been conducted with Hawaii's Honeycreepers before the establishment of this conservation program. A number of species have been since bred in captivity, in particular the Palila (Loxoides bailleui), a finch-like species adapted to eating poisonous mamane seeds. It is estimated that it now only occupies less than 10 percent of its original range on the Big Island of Hawaii, with a total population of fewer than 5,000. A captive breeding program for the Palila was established in 1996, and 18 of the resulting offspring were released from 2003 through 2006. It was confirmed that some of these birds had reproduced in the wild in 2004 and 2005 (Warden, 2006). In

recent years, AFA has assisted in supporting this work (Warden, 2006).

At the same time, the Zoological Society's efforts snatched another island's passerine from the brink of extinction. The San Clemente Loggerhead Shrike (Lanius ludovicianus mearnsi), confined to the California Channel Island of that name, was found to number no more than 20 in the early 1990s. As Loggerhead Shrikes have never been a common avicultural subject, experiments were first conducted with birds from the California mainland (L. l. gambeli). Eggs of this subspecies were collected from the wild and hatched at the Avian Propagation Center (Keuhler, 1991), where an optimal handrearing protocol was determined. Six chicks and four eggs (transported in millet) were then collected on San Clemente, and transported to the zoo's Avian Propagation Center, where complete success was achieved with the rearing of 10 chicks (Lieberman, 1991). These birds were returned to the island, where in situ aviaries were constructed for a captive-breeding project, administered by the Zoological Society, and funded by the U.S. Navy. A captive flock of roughly 60 birds has since been established there. Initially, hand-reared chicks were released, but none were recruited into the wild population. Since 2000, parent-raised



PHOTOGRAPHY BY DAVID RIMLINGER

Above left, Art Risser exploring a new enclosure. Above right, Risser at the dedication of an exhibition for Chinese Monals. The U.S. zoo importation of this rare pheasant was made during his curatorship.

birds have been liberated, and substantially augmented the breeding population (Lindholm, 2008).

While the projects for Hawaiian passerines and San Clemente Shrikes were initiated with careful planning and research, another long-term island project began when rare birds unexpectedly entered the zoo's collection under startling circumstances.

As Art related it: "It was late on a Sunday afternoon, 2 October 1977, when I received a call from the Security Office notifying me of three visitors, 'They're interested in birds and want to ask you some questions'. And indeed they were interested in birds! Through an interpreter who said she was a French-Canadian, the two men, one from New Caledonia and the other from Tahiti, expressed a desire to obtain the names of several aviculturists and avicultural organizations in Southern California from whom they might be able to acquire birds for their private collection. After providing them with a reference sheet of

bird societies and the names of a few local bird fanciers, I casually asked, with tongue in cheek, if they were truing to peddle 'hot birds'... "Oh, certainly not," I was assured. Their major interest was just to get acquainted with the private collectors so that they might be able to exchange birds. The next day I saw contacted by one of the aviculturists whose name I had provided. "Hey, what do you know about two guys offering Vini peruviana... They called yesterday and offered to sell these birds for \$7,000 a pair! I didn't know there were any in the country..." (Risser, 1978a). Years later, Sheldon Dingle told me he made the call.

The six smuggled birds were seized by U.S. authorities five days after Art's visit. At the time, there was still great concern regarding the threat of a Newcastle's disease outbreak posed by un-quarantined birds, and had they been anything else they would most likely have been destroyed. But, since they were endangered birds of a species not seen in aviculture in more than thirty years, the government granted them a reprieve, especially in the face of impassioned correspondence from the AFA and other aviculturists (Risser, 1978a, Low, 1985). It was instead agreed to send them to England for quarantine, in the aviaries of none other than Rosemary Low. It was the intention to send them to San Diego, but after a ninety day quarantine in Ms. Low's aviaries, half of them developed fatal stress before they reached the airport. It was agreed to keep the remaining three in her care, where they soon bred (Low, 1985).

By that time, San Diego Zoo already held Tahiti Lories, as another smuggled group was confiscated on Jan. 25, 1978. This time, these eight birds had been quarantined in Honolulu. At least 50 would be fully reared there. Sadly, this species was not to be established in aviculture, partially due to the unusual aggressiveness between members of breeding pairs, and susceptibility to stress, leading Rosemary Low to consider them "the most heart-breaking " of the more

than 200 species of parrots she had worked with (Low, 1998). However, this experience was to lead the Zoological Society of San Diego to profound involvement in the conservation of Central Pacific birds.

The provisions of a 1988 master plan for the zoo's Tahiti Lories included in situ programs in French Polynesia. This commenced in January, 1990, when several staff members traveled there to meet with government officials with the purpose of creating joint programs between the Zoological Society and the French and local governments (Kuelher, 1990). (French Polynesia is politically an Overseas Department of France). Initially, these efforts focused on the Tahiti Lory and its aviculture, and included the addition of a male and four females to San Diego's holdings in 1990 (Lowe, 1998) (ISIS continues to list two specimens at San Diego). However, the focus soon shifted to the neighboring Marquesas, where the Ultramarine Lory (Vini ultramarine) was undergoing an alarming population decline.



PHOTOGRAPHY BY DAVID RIMLINGER

Risser and John Azua (now Curator of Birds at Denver Zoo), on expedition In Papua New Guinea in 1986.

By the early 1990s, it appeared that the only viable population existed on the island of Ua Huka, descended from a single pair introduced from the island of Ua Pou in 1941 (Kuehler et al, 1996). Working with local authorities, the San Diego team transferred 29 birds to the island of Fatu Hiva, where there were then no lories. The bird were divided in three shipments, one each year from 1992 through 1994. By 1994, juveniles were observed on that island. Attention was also focused on the conservation of the enormous Nuka Hiva Imperial Pigeon (Ducula galeata), conducting biological surveys. Neither of these Marquesan species was ever brought to the San Diego Zoo. Art was very much involved in these programs, repeatedly traveling to French Polynesia himself in his capacity as general manager and director of animal collections.

Art's most celebrated involvement in conservation aviculture was his tireless and determined efforts to establish a captive breeding population of California Condors. He did this in the face of massive opposition from powerful conservation groups. At times, in the 1980s, I was reminded of these lines from Tom Lehrer's song, "Poisoning Pigeons in the Park":

"We've gained notoriety and caused mush anxiety in the Audubon Society with our games. They call it impiety and lack of propriety and quiet a variety of unpleasant names."

Indeed, the National Audubon Society, which had given guarded support since 1975 to forming a captive breeding program for this species, came out in total opposition against capturing the final wild adults following the loss of six of the remaining 15 wild birds in the winter of 1984–1985, going so far as to sue the U.S. Fish and Wildlife Service (Risser, 1987).

In the end, the captive breeding advocates prevailed, and the last wild Calfornia Condor was taken into captivity in 1987. The total world population then stood at 27 birds. The world first full captive breeding took place at the San Diego Wild Animal Park in 1988. By 1998 there were more than 150 living condors. Today, there are more than 350, with almost 200 in the wild, in the U.S. and Mexico. Reproduction among wild birds resumed in 2003.

The San Diego Zoo, which had maintained a California Condor from 1929 to 1940, had sought to inaugurate a breeding program in 1949, when it applied for a permit to capture one pair. The zoo had good reason to anticipate positive results, as a pair of Andean Condors produced nine chicks there from 1942 through 1952 (Risser, 1981c). A permit was granted by the California Fish and Game Commission in 1952, but this was rescinded in 1954, before any birds were captured, because of opposition, from other parties, the Audubon Society (Toone, 1991).

Art's efforts toward reviving a captive propagation program for California Condors began during his curatorship of the bird department. A vital early step occurred as part of his collection reduction strategy. San Diego's 1942–1952 Andean Condor breedings had occurred in a huge aviary built by the Works Progress Administration in 1936. In 1960 this aviary became the walk-through rainforest, and many of its fomer exhibited in a large former koala cage near the elephants. In 1970, a large new aviary, constructed in the then novel suspension wire and telephone pole style, was constructed in a canyon. It was filled with birds of prey from around the world, including several Andean Condors, but, to my knowledge, only ravens bred there.

In 1980, Art dispersed the birds in this aviary and it became the sole abode of a pair of Andean Condors, on breeding loan from the Houston Zoo (Risser, 1981c). With the hatching of "Rodan" in 1981, the propagation of this species resumed at the San Diego Zoo after a hiatus of 29 years. The significance of this achievement went beyond the obvious implications. The egg from which "Rodan" hatched was pulled for artificial incubation two days after it was laid. The Houston pair laid another

egg a month and three days after the first one, and reared the resulting chick themselves (Toone, 1981b). Thus, reclutching, already accomplished at San Diego in 1950 (Lint, 1959), was demonstrated to skeptics, paving the way for the initiation of a program, which, through 1986 collected 16 eggs from five pairs of California Condors for artificial incubation. Four of the pairs double-clutched and three triple-clutched (Snyder & Snyder, 2005).

Of the 16 collected eggs, 13 produced surviving chicks. It is, of course, well known that they were hand-raised with puppets. The Andean Condor that hatched from the first 1981 egg at the San Diego Zoo, was puppet-reared (Risser, 1981d, Toone, 1981b), setting in place the protocol for raising the astounding number of California Condors at the San Diego Wild Animal Park, Los Angeles Zoo, and Peregrine Fund, which reversed this species decline towards extinction. This procedure had been developed by Michael Wallace, then at the University of Wisconsin. He went on to direct the California Condor propagation efforts at the Los Angeles Zoo, and is now employed by the Zoological Society of San Diego where he serves as the Director of the California Condor Recovery Team.

William Toone, then a keeper in the zoo's bird department, was responsible for puppet-rearing "Rodan" (Toone, 1981d). He went on to became the Curator of Birds at the San Diego Wild Animal Park, and served the Zoological Society in other capacities before became the Director of the ECOLIFE Foundation, which he founded. Bill Toone, in an interview with the San Diego Union-Tribune (Gonzalez, 2009) reminisced about a pivotal hearing of the Department of Fish and Game where much opposition was expressed towards the taking of the last California Condors into captivity: "It was a packed hearing and all these people were bringing up challenges... Art never moved and he never raised his hand, even when they mentioned him by name. I wondered, 'Why doesn't he defend it?' He waited about a minute before the end of the hearing and he answered every point and argument. In just a couple of sentences, he addressed all the issues and concerns in a beautiful way... He got the last and very eloquent word, not because he wanted to get the last word, but because he wanted to formulate concise answers that would address all the concerns."

Although much of the subsequent work with California Condors, Art was very much involved in their day to day husbandry. ("Those suckers were rank!" was his comment on the specially designed handrearing puppets, after a certain period of use.) In Noel and Helen Snyder's (2005) authoritative book on the species, Art appears and very hands-on in plates 68 and 75. In a presentation he made at the 1987 Delacour Convention, a year before the first captive-conceived bird was hatched, Art concluded by observing: "So long

as endangered species exist, and as long as there are biologists who are thoughtful, analytical and resolute, there will always be controversy. But as responsible stewards for wild life, our obligation should be to provide the support necessary to supplement and bolster what we see faltering in nature because of our own selfish presence. How well we accomplish this will be measured in the annals of natural history by future generations" (Risser, 1987).

Art's 1980 decision to reduce the population of the 1970 flight cage to a single pair of Andean Condors was not only to have far reaching effects for California Condors, but for Andeans as well. Following the production of the two 1980 chicks, breeding continued at the zoo. Some female birds were experimentally released in California Condor habitat (and eventually retrieved) 1980s. All 10 breeding pairs of Andean Condors in American zoos were encouraged to doubleor triple-clutch. By the end of the 1980s, there was a surplus of U.S.-bred male Andeans. It was decided to return these birds to South America, specifically to Colombia, at the northern edge of the species' range, where it was nearing extinction. A number of males were released, while other U.S.-bred pairs were placed in Colombian zoos to produce further candidates for re-introduction. Al Lieberman, who succeeded Art as the zoo's curator of birds in 1986, and had previously conducted Peace Corps-funded

field work in Colombia, oversaw these efforts, inaugurating his increasing involvement in the Zoological Society's offcampus projects.

Al Lieberman, Bill Toones, and David Rimlinger are but a few of the people who's life's work was deeply influenced by Art Risser. The San Diego Zoo's longtime director and CEO of the Zoological Society, Doug Myers, summed up Art's guidance thusly: "Art Risser was one those individuals who changed the world. But he never seemed to be aware of the magnitude of what he accomplished. He simply followed his heart, accomplishing the incredible with simplicity, genuine concern, and a desire to include everyone in his work" (Ginzalez, 2009).

With all his decades of the work for the Zoological Society, Art was also a devoted husband, father and gardener. His friendships were long-lasting. He was also seriously committed to the promotion of private aviculture.

The American Federation of Aviculture was inaugurated in part to contend with impending legislation that, if implemented, might very well have resulted in a far more restricted form of aviculture than that which we are privileged to practice today. Threatening to arrive on the heels of the 1973 Newcastle's importation restrictions was legislation that Art described thusly: "In 1974, the injurious wildlife legislation was proposed which would have curtailed altogether the importation of some species of birds as being detrimental to certain 'named

interests'. At least for the time being, the injurious wildlife proposal has been tabled but by no means have we heard the end of it" (Risser, 1976a). That proposal was one of the prime targets of AFA's first lobbying efforts, led by Jerry Jennings, and, nearly 40 years later, it continues to be held at bay. It is thus not surprising that Art was an enthusiastic early supporter of the AFA. He found time to write three articles for Watchbird in its early years (Risser, 1977a&b, 1980). Early issues of this magazine are full of pictures from San Diego's famous photo library. And the AFA National Convention at San Diego in 1981 will be long remembered for the 750 delegates who attended, and its remarkable speakers' list (Low, 2006, 34). The San Diego Zoo and Wild Animal Park were very much involved in this event.

Conclusion

I will conclude this appreciation on a personal level. Art's "desire to include everyone in his work," as above noted by Doug Myers, had a profound effect on my own life. I had spoken to Marvin Jones, the legendary zoo historian when I was 13 and 14, while he was living in the San Francisco Bay area. However, a true friendship began when I was 20, when Art made a point of reintroducing us. By that time, Marvin, retired from the U.S. Army, was registrar at the San Diego Zoo. When I was 21, Art arranged a summer internship during which I spent a month compiling data from old newspaper clippings under Marvin's tutelage. I was able to do this again in 1984. By then, Marvin was essentially part of my family, and his encouragement, advice, and introduction to a myriad of zoo friends over a quarter century, until his death in 2006, have had an incalculable effect.

As previously mentioned, Art bore much credit for the Jean Delacour/IFCB Symposia on Breeding Birds in Captivity, held in Los Angeles in 1983 and 1987. As noted elsewhere (Jaffe, 1994), the efforts that resulted in the continued existence of the Guam Rail and the Guam Kingfisher began at the 1983 Symposium. That conference was also a milestone for me. In a corner of the exhibit room stand a glass case where I presented a poster session on Jean Delacour's work at the Bronx Zoo during World War II. That was my first public presentation, and eventually evolved into my first article for the Avicultural Magazine, one of the first things I ever published (Lindholm, 1988). It was a tiny detail in a magnificent conference, but Gerald Schulman kindly mentioned it at the closing banquet. At that moment, Art sitting up on the Dais, flashed me his "1,000-Watt grin" and a thumbs-up-a memory I will always cherish.

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References

- Anon. (1987) International Foundation for Conservation of Birds. Proceedings—Jean Delacour/ IFCB Symposium on Breeding birds in Captivity xi-xviii.
- Bell, C. (1995) Tracking the elusive monal. *ZooNooz* 68 (No. 4):8–13.
- Bercovitz, A.B, F. Frye, & J. Bain (1983) What sex is that condor?. *ZooNooz* 56 (No. 10): 14–15.
- Dolan, J.M. (1966) From the Boehm aviaries... where birds are capture in porcelin. *ZooNooz* 39 (No. 3): 8–9.
- Dolan, J.M. & M. Moran (1970) Historical list of Aves exhibited and bred in the San Diego Zoological Gardens (Part 1. Psittaciformes). *Der Zoologischer Garten* 39: 41–57.
- Gonzalez, B. (2009) Obituary: Art Risser; zoo manager played key role in conservation Programs. San Diego Union Tribune, Jan. 2: www.signon sandiego.com/news/2009/ jan/02/1m2risser232759-artrisser/
- Greeley, A.C. (1983) 60 and in their prime. *ZooNooz* 56 (No. 2):13-16.
- Jaffe, M. (1994) And no birds sing— The story of an ecological disaster in a tropical paradise. Simon and Schuster.
- Jouett, J. (1982) Heart of the Zoo—A swingin' place. ZooNooz 55 (No. 10):11-23.
- Kuehler, C. (1990) Saving the Coconut Bird: The Polynesian Lory Conservation Project. *ZooNooz* 63 (No. 8): 12–13.
- . (1991) Hand-rearing protocol for the San Clemente Island Shrike. *ZooNooz* 64 (No. 10): 13.
- Kuehler, C. & A. Lieberman. (1994) The avian propagation center goes afield. *ZooNooz* 67 (No. 6):10–13.
- Kuehler, C., A. Lieberman, A. Varney, & J. Azua. (1996) Translocation of Ultramarine Lories (Vini ultramarina). AFA *Watchbird* 23 (No. 3): 44–45.
- Lieberman, A. (1988) Chinese pheasant breeding program at the San Diego Zoo. AAZPA Annual Conferences *Proceedings*: 1988: 21–26.
 - ____. (1991) El Mensajero del Sol: Reintroduction of the Andean

- Condor. ZooNooz 64 (No. 11): 6–11.
- . Lieberman, A. C. Kuehler, A. Varney, & W. Everett (1994) Island Conservation: A biological imperative. *ZooNooz* 67 (No. 3): 18–21.
- Lindholm, J.H. (1988) Captain Delacour at the Bronx, 1940-1947. Avicultural Magazine 94: 31-56.
- . (1993) K.C. Lint, March 19, 1912—December 3, 1992 (Part I) AFA *Watchbird* 20(No. 2): 55–56.
- _____. (1993) The publications of K.C. Lint. *Avicultural Magazine* 99: 79–92.
- _____. (2008) Notes on the IV International Symposium on Breeding Birds in Captivity. *Avicultural Magazine* 114: 49–62.
- Lint, K.C. (1959) San Diego's Andean Condors—A closeup of one of the world's most inaccessible birds. *ZooNooz* 32 (No. 3): 3–7.
- Lint, K.C, E. Bajet, & L. Olsson (1990) Two interviews with Kenton C. Lint, conducted by Edmond Bajet, 21 March and 9 May, 1984, edited by Lyn Olsson, November, 1988. Zoological Society of San Diego, San Diego State University Library.
- Low, R. (1985) Breeding the Tahiti Blue Lory (Vini peruviana). *Avicultural Magazine* 91: 1–14.
- _____. (2006) A century of parrots. Isignis Publications.
- Lucas, J, N. Duplaix-Hall, & R. Biegler (1972) Species of wild animals bred in captivity during 1970. *International Zoo Yearbook* 12:3 11–375.
- Morris, D. & C, Jarvis (1960) Species of mammals and birds bred in captivity during 1959. *International Zoo Yearbook* 1: 138–156.

- Nickel, M. (1994) Birds do it... with a little help from the Zoo's Avian Propagation Center. *ZooNooz* 67 (No. 10): 6–13.
- Olney, P.J.S., R. Biegler, & P. Ellis (1976) Species of wild animals bred in captivity during 1974 and multiple generation captive births. *International Zoo Yearbook* 16: 332–410.
- Olney, P.J.S., P. Ellis, & B. Sommerfelt (1988) Species of wild animals bred in captivity during 1985 and multiple generation captive births. *International Zoo Yearbook* 27: 341–435.
- Olney, P.J.S., F.S. Fisken, & L.J. Davolls (1998) Species of wild animals bred in captivity during 1995/1996 and multiple generation captive births. *International Zoo Yearbook* 36: 363–551.
- Ring, C. (1931) Failures and little

successes. Aviculture Series 2, Vol.3: 81–84.

- Risser, A.C. (1974) Avian scavengers. ZooNooz 48 (No. 10): 4–11.
- _____. (1976) The endangered rheas. *ZooNooz* 49 (No. 11): 30. ____. (1977) From the four cor-
- ners of the world. *ZooNooz* 50 (No. 9): 4–9. . (1977) Blue Mountain Lori-
- keet or Swainson's Lorikeet. AFA *Watchbird* 3 (No. 6): 5.
- _____. (1977) Bird sexing—A new approach. AFA *Watchbird* 3(No. 6): 32.
- . (1978) The saga of the Tahitian Lories. *ZooNooz* 51 (No. 6): 15–16.

____. (1978) The heartbreak kids. ZooNooz 51 (No. 10):10-12.

- _____. (1980) Thick-billed Parrots. AFA Watchbird 7(No. 1):10–12. ____.(1981) The future of zoo bird-
- breeding programs. AAZPA
- National Conference Proceedings 1981.

____. (1981) Introduction. Proceedings—First International Birds in Captivity Symposium—1978 Seattle, Washington International Foundation of Conservation of Birds: iii–vi.

- ____. (1981) South America's Magnificent Condor. *ZooNooz* 54 (No. 7): 3.
- _____. (1981) Rodan meets the puppet people. *ZooNooz* 54 (No. 7): 17.
- _____. (1982) Hatching: A new plot. *ZooNooz* 55 (No. 1): 4–8. ____. (1987) California

Condors—A controversial path to survival. Proceedings—Jean Delacour/IFCB Symposium on Breeding birds in Captivity: 499–507.

- Snyder, F.R. & H.A. Snyder (2005) Introduction to the California Condor. University of California Press.
- Toone, W. (1981) Condor! The California Condor recovery proposal. *ZooNooz* 54(No. 12): 8.
 - ____. (1981) Rodan revisited. Zoo-Nooz 54 (No. 10): 10–14.
- . (1991) Return of the California Condor *ZooNooz* 64 (No. 10): 12–13.
- Warden, M. (2006) Saving the Hawaiian birds, AFA *Watchbird* 33 (No. 4): 6–8.

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