

Common Myna on Midway Atoll NWR, 1996

by Helen Baker¹, Paul E.

Baker¹ and Nanette Seto²

The Common Myna (*Acridotheres tristis*) was introduced to Hawai'i, from India, in 1865, and had become common throughout the windward islands by the 1930s. First reports that they had reached Midway Atoll were in 1971 when a pair was seen in flight, although it is not known how they got there (Kaigler 1972), but by the mid-1980s the population had increased to several hundred (Berger 1981, Richardson 1992). Richardson (1992) provides a comprehensive listing of censuses and reports from 1979 onward: In 1980, the population on Sand Island, was estimated at about 150-200 birds, and the species was absent from Eastern Island. However, in 1983 an estimate of 600-800 birds was made. In 1988, birds were seen on Eastern Island, but there have been no other records for the island. By 1991, the population on Sand Island, was estimated at 500-1000, illustrating a rapid increase in the population over the 20 years since they were first recorded. Richardson's (1992) own estimate for 1992, taken outside of the breeding season, was of 500 birds.

While major food resources for mynas on Midway include human waste and invertebrates, they feed extensively on dead eggs and chicks of seabirds (Berger 1981, Richardson 1992). They have been recorded attacking incubating adult White Tern (*Gygis alba*) and Black Noddy (*Anous tenuirostris*), eating their eggs and attacking nestlings, and pecking open eggs of Sooty Terns (*Sterna fuscata*) and noddies (*Anous* spp.) (Grant 1982, Tyler 1988, Harrison 1990, Richardson 1992). On Kaua'i, they have been observed entering burrows of Wedge-tailed Shearwater (*Puffinus pacificus*), and depredating eggs (Byrd 1979). However, the impact of Mynas on seabird productivity has not been quantified, and so there is no

justification for their control on Midway (Richardson 1992).

In early February, 1996, we conducted a census to determine the approximate size of the Myna population on Sand Island, and its distribution. The island had been divided into sectors (1 to 89) by USFWS for use in seabird counts and we used these sector numbers to map Myna occurrence. Groups of sectors divided by some feature, for example the runways, were chosen for census on the same day. Myna counts were made between 900 and 1600 per hour by two people on five consecutive days. Smaller sectors were covered by walking or cycling around the perimeter, larger ones by walking through on an unmarked zig-zagged transect, with both visual and auditory contacts recorded. In an attempt to calibrate for over-counting, due to birds moving between sectors, we counted birds in all sectors with high densities (>10 birds) in the afternoon of the fifth census day. On one evening during the census period we located roost sites, but were unable to make counts.

Figure 1, on page 19, shows Sand Island with Common Myna densities during February, 1996. The total count for all sectors combined was 817 contacts. Our calibration effort confirmed that those sectors with high densities supported similar densities at the same time, and so we estimate the population to be 750-850 birds. The highest density (383 contacts) was recorded around the active land-fill site at the southeast end of the island. Breeding activity during the census period was restricted to one instance of nest material being carried into a hangar. Three main roost sites were located, all associated with buildings, but other sites supporting small roosts were likely to have been in use.

Common Mynas on Sand Island were associated most closely with the active land-fill site and areas with buildings, either in use or abandoned. The land-fill probably provided foraging opportuni-

ties not only from fresh waste but also invertebrate populations utilizing the waste. Areas around buildings and the buildings themselves may provide many benefits to the birds, such as nesting and roosting sites and also improved foraging opportunities from human waste, food put out for them by residents, and invertebrates in the more lush, mowed lawns.

While, our estimate of 750-850 birds is higher than that made by Richardson (1992), some caution should be adopted in interpreting all the population counts so far made on Sand Island. Because Sand Island is so small bird movements may cause serious error in estimating populations, especially during the breeding season. The population may have increased little over the last 10 years, and may now be limited by nest site availability rather than food availability. The fact that they are seen so infrequently on Eastern Island, and there are no breeding records would suggest that nesting sites may be a major limiting factor in their use of that island. It seems unlikely that food availability may limit their use of Eastern Island. Mynas exhibit extreme intraspecific aggression during the breeding season, and will evict each other from suitable nest sites, even resorting to killing nestlings in such nests (HB, PEB pers. obs.). Similar behavior toward Black Noddy has been seen, with chicks displaced from nests and left to die on the ground (Grant 1982). Such infanticide directed toward other species might be competitive rather than predatory, based on natural intraspecific behavior.

There have been major changes on Sand Island in the last few years. Cleanup operations have resulted in the removal of many of the disused buildings on the island; Hazmat, NAVFAC, abandoned housing, school, chapel, officers' housing, fuel farm installations, and some of the larger utility buildings have all been demolished. The human population has become much smaller since June,

continued on page 19

Mahalo a nui loa to our Annual Appeal Donors

The Board of Directors and the Staff of the Society wishes to thank those who responded between November, 1998 and March, 1999 to the Fall, 1998 Annual Appeal. These contributions will be used to support conservation and education programs related to the protection of Hawai'i's native wildlife and habitats.

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Hawaii Audubon Society

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FAX (808) 537-5294
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Common Myna continued:

1997, when manpower associated with the clean-up process withdrew, and so there should now be less human waste. Control of rats (*Rattus* spp.) has intensified, with complete eradication from Midway expected in the next few years. All these changes are likely to impact the Myna population and may even result in a decline, due to nest site competition. An increase in nest site competition may also cause an increase in aggressive interaction between Mynas and Nesting

noddies and White Tern. Regular censuses in future would be valuable in assessing the impact of these changes, and formal research on the direct impacts of Mynas on seabirds would be valuable in further assessing management of this species.

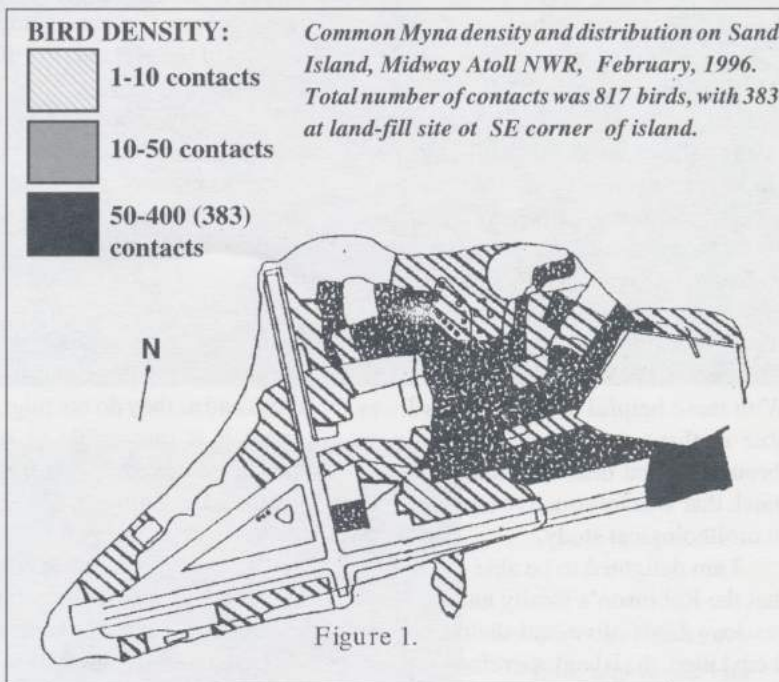
There is some evidence that eradication of Common Myna from Midway would be beneficial to some nesting seabirds. The distribution of the population and flocking behavior during the non-breeding months could make certain control measures efficient. The large num-

ber of birds using the land-fill site could be removed by a combination of methods including baited live-traps, whoosh netting and mist-netting. Live birds could then be killed humanely. Mist-netting at roost sites may be one way to capture large numbers of birds but may be difficult to do. During the breeding season, destruction of eggs would be the most humane way to reduce productivity, and use of dummy eggs to replace clutches may reduce frequency of repeated nesting attempts.

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1st footnote: 44 Springfield Road, Etwall derby DE65 6LA, UK
2nd footnote: U.S. Fish and Wildlife Service Midway Atoll NWR
c/o Midway Island Station -#4, P.O. Box 660099 Lihue, HI
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Paradise Pursuits

by Sylvianne Yee,
Paradise Pursuits Coordinator

FIVE O'AHU TEAMS IN PLAY OFFS

After months of planning, many phone calls and e-mails, and even more memos, the Paradise Pursuits games are off and running. The O'ahu preliminary games were held on February 20 and 27 at 'Olelo, The Corporation for Community Television. Twenty-one teams from O'ahu high schools came out to show off their environmental knowledge in some very exciting (and often close) games.

At the end of the two days, five teams emerged as preliminary winners to advance to the play-off games to be held at 'Olelo on March 16. The O'ahu play-off winners and their coaches are: Aiea

(Jason Brennan), Kamehameha (Chuck Burrows), McKinley (Alison Iwamoto), St. Louis (Tim Ho), and Waipahu (Stephen Nakano). They, along with the winning teams from Hawai'i, Kaua'i, and Maui, will match wits to see which four schools make it to the semi-final and final rounds to be televised on KITV. The play off games will be televised on public access channels on all islands.

Special thanks go to the game personnel who gave up a precious Saturday to come out and help run the games. These generous volunteers are Wendy Johnson, Maile Alau, Ron Walker, Luisa Castro, Liz Kumabe, Suzan Harada, Larry Kimmel, Michael Ferron, Charlotte Nagoshi, Nora Morita, Amy Taniguchi, and Mary Miyamoto. Mahalo to them and congratulations to the O'ahu play off winners!

HECO COMES THROUGH AGAIN

For the eighth year, Hawaiian Electric Company has honored the Hawaii Audubon Society with a huge grant to support Paradise Pursuits, Audubon's environmental quiz program for high school students. HECO recently awarded HAS \$20,000 for Paradise Pursuits' 1999-2000 program year. With the awarding of this grant, Hawaiian Electric Company continues to demonstrate its commitment to creating a better Hawai'i for all to live in through the education of our youth.

Our heartfelt thanks to HECO and Scott Shirai, Director of Community Relations, for their continued support as the major funder of our educational program. We look forward to many more years of working together.

Mr. George C. Munro's report from Ni'ihau Observation (Nov. 2, 1939)

In cooperation with the Bernice Pauahi Bishop Museum, Hawaiian Sugar Planters' Association, Board of Agriculture and Forestry and Hui Manu, I started a survey of the birds of Hawai'i in 1935. The part connected with the six largest islands was finished in 1937. However, a good deal remained to be done on the smaller islands and these had to await fitting opportunities. This research work has since been carried on in cooperation with the Bishop Museum.

In this connection by courtesy of the Robinson family, owners of the Ni'ihau ranch, I have recently been enabled to make a study of ornithological conditions on the island of Ni'ihau. Transportation across the channel from Kaua'i was by the ranch launch. Horses and guides were furnished; valuable information was given my members of the family, the ranch management and its Hawaiian employees. Every facility was given to visit places frequently by birds. With these helpful considerations I was able in three days spent there to pass through a great deal of country and see much that was informative and cheering in ornithological study.

I am delighted to be able to tell you that the Robinson's family and employees love birds alive and dislike seeing them killed; the island, therefore, is practically a bird sanctuary, a gun is seldom fired there. This is an extremely satisfactory condition.

1999-2000 Dan Moriarity Memorial Scholarship

The Kilauea Point Natural History Association annually awards a scholarship in the memory of Dan Moriarity, an outstanding environmental educator and conservationist. Dan played a major role in fostering a strong conservation ethic in the community, an ethic that continues to this day. The award, up to \$3,000, is applied directly to college or university tuition.

Students studying in the broadly defined fields of botany, zoology, history and related subjects concerning the Hawaiian environment are encouraged to apply. The fields of wildlife management, interpretation, conservation and environmental education are also included. To be eligible, the student must have been a resident of Hawai'i within the last five years, be accepted or en-

There are many lagoons on the island, for the most part temporary. Large areas are under water during the heavy rains and at that time the island is a paradise for the native and migratory swimming and wading birds. These lagoons recede and dry up to a great extent; in the drier seasons most of them dry up entirely. The birds then evidently migrate to other islands of the group and if not adequately protected will eventually be killed out. There had been some good rains before I came, and now a fair amount of water stands in a number of the lagoons.

The Hawaiian stilt held the greatest interest for me on this trip. From counts made on eight or nine lagoons, I judge there are several hundred stilts on the island. These probably migrate at times to O'ahu, Moloka'i, Kaua'i and perhaps other islands of the group. Of this we have no direct evidence, but the birds disappear from there and from O'ahu at times and as they do not migrate from the group it is reasonable to suppose that they must move between islands according to feed conditions. With this in mind, we must all do our part in the protection of these birds if the species is to be perpetuated. We can be assured that any protection we give the birds will be fully cooperated in by the Robinson's family and this means a great deal due to conditions that prevail on their Ni'ihau ranch. On some of the lagoons we approached

quite close to the stilts and also the Bristle-thighed Curlew feeding on the grass landing adjoining. This is direct evidence of careful protection. We can easily obtain these conditions here if we take the proper steps. The curlew is fairly common on Ni'ihau, but has almost disappeared from the other islands where it has been at the mercy of sportsmans' guns. Its natural tameness makes it an easy prey. We saw several hundred migratory ducks and a few of the native species. The latter is unfortunately much reduced in numbers. It, with the migratory birds is under closed season at present, but will again come under open season unless we have it (Koloa) removed from the list of game birds and permanently protected

The migratory ducks will also come under open season and if we do not provide sanctuaries on O'ahu for them they will leave us for Maui and Ni'ihau and we will be deprived of the pleasure of seeing them on the wing and in the water. Measures are now being taken on the mainland by which these birds can be kept permanently as game birds and retained at a reasonable number. We must cooperate with the sportsmen to this end. The Golden Plover and Turnstone are in large numbers on Ni'ihau especially the former. I saw a few of the Wandering Tattler and Sanderling. I was disappointed to find the Coot scarce and the Mudhen almost unknown. The Black-crowned Night Heron seldom visits there.

Mahalo

A sincere and heartfelt Mahalo to our new 'Elepaio layout volunteer, Mitchell Lee Groth ("Mitch"). Mitch spent countless hours in February getting the March 'Elepaio together.

The Board of Directors and staff extend our sincere appreciation to him, and hope that an adequate supply of good coffee keeps him coming back and volunteering for us long into the future. Thanks Mitch!

February Field Trip to Kaua'i

by Mary Gaber, Field Activities Coordinator

On the February trip to Kaua'i, our intrepid lady trailbuilders are shown at work clearing a small loop trail (see picture at right) near the Kilauea Lighthouse. They also planted naupaka shrubs and hala trees alongside the trail. This new trail will open up a closer view of the nesting area of the Red-footed Boobies at the Kilauea National Wildlife Refuge. The Refuge is also home to several Nene, as well as Red-and-White-tailed Tropicbirds, Laysan albatross and Wedge-tailed Shearwaters. The group was treated to a visit to the interior of the lighthouse. Many whales were seen from the Point, and we also spotted some performing spinner dolphins. HAS has made a commitment to send a work party over to the Refuge every year on the Presidents' Day weekend.

Plans for some other upcoming field trips this year will include a hike into Pia

Valley to see the O'ahu 'Elepaio, a reef walk, and visits to the Red-footed Booby colony at the Marine Corps Base, the

'Ewa Plains sinkholes to look for bird fossils, and the Ki'i Unit of the James Campbell National Wildlife Refuge.



On our January field trip to Ka'ena Point, HAS member, Jean Carr, pointed out the size of the Albatross footprints in the sand as compared to her hand.

Original Articles Wanted

The Hawaii Audubon Society encourages you to submit articles about research results in fields related to Hawaiian natural science. Reports of observations of Hawaiian birds or bird life are also welcomed.

One of the purposes of the 'Elepaio is to publish original, peer-reviewed articles on matters of interest to its members. The

'Elepaio has been published since the founding of the Society in 1939 and currently has a worldwide readership of more than 2000, which includes North America, Europe, Australasia and Africa.

Original photographs and illustrations of Hawaiian birds are also welcome. They may be either color or black and white prints, 3.5 by 5 inches or larger.

They should be clearly labeled as to subject and photographer/artist. Please include permission to publish along with your address and phone number.

Four copies of manuscript should be submitted for review. All materials should be sent to the HAS office (850 Richards, #505, Honolulu, HI 96813).



Preliminary Report on the Feeding of Fledglings in a Multi-Family flock of the Hawaiian 'Akepa (*Loxops coccineus coccineus*)

by Sabrina M. Clark, recipient of 1998 Research Grant from HAS

Introduction: The objective of Hawaiian 'Akepa (*Loxops coccineus coccineus*) observations was to determine if the feeding behavior of fledglings included kin selection and reciprocal altruism. Large flocks of post-nesting 'Akepa include dependent fledglings from June until September. Observations of fledglings are dependent upon reproductive success. 'Akepa generally fledge one young per year (Lepson and Freed, 1997). Primary objective to observing the feeding of fledglings in multi-family flocks would be to determine if there was successful breeding that year.

Methods: 'Akepa were observed at Hakalau Forest National Wildlife Refuge on the island of Hawai'i. Observations occurred between the dates of 29 July and 22 August, 1998. Observations were made late in the summer because hand observations of female 'Akepa on 2 May revealed no brood patches. No nesting behavior or fledglings were observed in May, suggesting a late brooding season that may extend into early June (Freed pers. comm.). 'Akepa were observed with Leica binoculars (10X42) and time, position and observations were recorded into a notebook.

Results: Feeding behavior of an 'Akepa fledgling was observed for forty-two minutes on 31 July at dusk. The begging

was focused on a female with a gold chest. The female had a red and blue band on the left leg, and a red and an aluminum band on the right leg, which made for accurate identification. The fledgling was the only one seen or heard within Hakalau Forest National Wildlife Refuge. Three 'Akepa fledglings were observed at Piedro during the week of 10 August (Hart pers. comm.). A total of 83 'Akepa were observed. Six of the 'Akepa were within six flocks that had an even ratio of males to females. One flock was segregated according to sex and the males were exhibiting antagonistic behavior toward each other. Male 'Akepa were observed chasing each other six times and one male chased an 'Apapane (*Himatione sanguinea*) off of a 'Ohi'a flower and later chased an 'I'iwi (*Vestaria coccinea*) in flight.

Juveniles of other species were also noted. Three independent 'Apapane, one dependent Japanese White-eye (*Zosterops japonicus*), one independent 'Elepaio (*Chasiempis sandwichensis*), and two dependent Red-billed Leiothrix (*Leiothrix lutea*) were observed.

Discussion: The single independent 'Akepa fledgling was observed soliciting food, which does not suggest altruistic behavior. Additional observations need to be made in order to rule out the

possibility of altruism in 'Akepa flocks. Birds at Hakalau had low reproductive output this past summer. It is possible that the El Nino effect upon Hawaiian weather was a contributing cause to the low reproductive success. The observation of three 'Akepa fledglings at Piedro suggest that breeding success may be somewhat site specific. 'Akepa behavior indicates that the pre-breeding season may occur early this year (1999). Antagonistic behavior between males usually begins in late fall and chasing was observed late in the summer. The equal ratio of male-female pairs to flocks indicates that flocking behavior may be dissipating before the usual time in October (Lepson and Freed 1997). The initial objective to observe 'Akepa fledgling feeding behavior was minimized by the low number of offspring at Hakalau. 'Akepa pre-breeding behaviors observed early in the year suggests that breeding may occur early in 1999.

Future Effort: The Hawaii Audubon Society provided funding for four trips to Hakalau to observe 'Akepa fledglings feeding within multi-family flocks. Two of the four trips were taken over the summer of 1998. The remaining two trips will be taken in summer of 1999 to determine breeding success and the feeding behavior of fledgling 'Akepa.

Additional Notes on the Birds of Ka-ho'olawe (Sightings of Ka-ho'olawe Birds," Morin et al, 'Elepaio, Volume 58, Number 9, December 1998/January 1999, pgs. 55, 62-65).

by Ronald L. Walker, January 6, 1998

In the interests of adding to the history of bird life on Ka-ho'olawe, I offer this follow-up to the recent 'Elepaio article. On April 22 and 23, 1980, I participated in a land and sea survey of the island that was requested by the U.S. Navy to primarily document plant life.

The findings relative to bird life were reported to the State Division of Forestry and Wildlife in the form of a memorandum ("Report on Trip to and Around

Kaho'olawe Island and to Molokini," from Ronald L. Walker, Chief, Wildlife Branch to Libert K. Landgraf, State Forester, June 9, 1980.").

Birds seen both on the 1980 and 1997/1998 surveys included Wedge-tailed Shearwaters and Brown Boobies (both at sea), Black Noddies, Gambel's quail, Wandering Tattlers, Spotted doves, Zebra doves, Northern cardinals, House finches and House sparrows.

The supposition in the recent article that Black Noddies "... certainly must breed on the cliff faces" is supported by

a comment in the 1980 memo that: "Two fairly significant sea caves were found in the cliffs between Lae O Kaka and Lae O Halona that were being used by the Hawaiian Noddy Tern. The larger of the two caves harbored approximately 45 Noddies."

Other birds seen at sea close to the island from the boat were Red-tailed Tropic birds, Grey-backed Terns and Sooty Terns. Additional land birds noted during the 1980 trip were a White dove (*Columba livia*) and a Black-crowned Night Heron, 'Auku'u (*Nycticorax nycticorax hoactli*).

U.S. Fish and Wildlife Service Proposes to Remove Tinian Monarch from Endangered Species Act Protection

Source: U.S. Fish & Wildlife Service News Release 02/22/99. Contact: Barbara Maxfield—(808) 541-2749 or 342-5600

Based on recent population surveys, the U.S. Fish and Wildlife Service proposed in late February to remove the Tinian Monarch, a small flycatcher found only on the island of Tinian in the Commonwealth of the Northern Mariana Islands (CNMI) in the western Pacific, from the list of threatened and endangered species.

If the proposal is finalized, this will be the fourth Pacific bird species removed from the protection of the Endangered Species Act due to its recovery.

The Tinian Monarch is a small (6-inch or 16-centimeter) flycatcher with light rufous underparts, olive-brown upperparts, dark brown wings and tail, and white rump and undertail coverts. It feeds primarily on insects.

Current population estimates indicate approximately 57,000 Tinian monarchs exist on Tinian. They forage and breed throughout the entire island both in nonnative tangentangen and in native limestone forests. However, they live and reproduce in much higher numbers in the native forest.

The Tinian monarch was originally listed as an endangered species in 1970. The CNMI government also placed the bird on its list of threatened and endangered species.

"Severe habitat loss due to clearing of land for cattle grazing and sugarcane farming prior to World War II, and later extensive reconstruction during the war, led to very low population estimates," said Anne Badgley, the Service's regional

director for the Pacific Region.

The decision to list the monarch was based on estimates of 50 or fewer birds after World War II. Its numbers have increased considerably in the intervening years, Badgley added.

As tangentangen forests grew back to replace the cleared native forests, the monarch thrived. A survey of the monarch population in 1982 found the population to number approximately 40,000 birds, and the species was subsequently downlisted to threatened status in 1987. The ability of the monarch to survive and thrive despite severe habitat modification is a testimony to the hardiness of this unique island bird, according to Fish and Wildlife Service biologists.

Although some development of the island of Tinian is expected in the future, most of the best monarch habitat—native limestone forest—is likely to remain because it occurs along cliff faces where development is not possible. Large tracts of tangentangen habitat in which the monarch also survives and reproduces quite well are leased by the U.S. military, and development on those sites is expected to be minimal. Increased efforts to prevent the introduction of predatory brown tree snakes from Guam are underway and will help protect all bird species on Tinian.

Future monitoring of this species will be conducted to ensure that its populations do not decline to a level that threatens its long-term viability. The Service will continue current discussions

with the government of Tinian to establish wildlife conservation areas.

The Service published the proposed decision to delist the species in the *Federal Register* on February 22, 1999. A public comment period is open until May 17, 1999. Comments should be sent to the Pacific Islands Manager, U.S. Fish and Wildlife Service, 300 Ala Moana Blvd., Room 3-122, Box 50088, Honolulu, Hawai'i 96850. Copies of the proposed rule are available by calling the Pacific Islands Office at (808) 541-3441.

The U.S. Fish and Wildlife Service is the principal federal agency responsible for conserving, protecting, and enhancing fish and wildlife and their habitats for the continuing benefit of the American people. The Service manages the 93-million-acre National Wildlife Refuge System comprised of more than 500 national wildlife refuges, thousands of small wetlands, and other special management areas. It also operates 66 national fish hatcheries and 78 Ecological Services field stations. The agency enforces Federal wildlife laws, administers the Endangered Species Act, manages migratory bird populations, restores nationally significant fisheries, conserves and restores wildlife habitat such as wetlands, and helps foreign governments with their conservation efforts. It also oversees the Federal Aid program that distributes hundreds of millions of dollars in excise taxes of fishing and hunting equipment to state fish and wildlife agencies.

April Field Trip to be held at Ho'omaluhia Botanical Garden on Saturday, April 17

The April field trip will be a repeat of our "Dam Walk" at Ho'omaluhia Botanical Garden in Kane'ohe. We will hike up to the lookout point first to get an overview of the Garden and the surrounding mountains. Last time we visited we saw about seven waterfalls. Bring your camera.

Wear good hiking shoes, and bring binoculars, rain gear and mosquito repellent. We will be seeing flocks of small introduced birds such as Common Waxbills, Chestnut and Nutmeg Mannikins,

and Java Sparrows. Both species of Bulbuls and White-rumped Shamans are common.

We'll also try to sneak up on the Black-crowned Night-herons that live in the Garden. Bring a lunch if you wish. Car pool from the Hawai'i State Library at King and Punchbowl at 8:30 a.m. or go directly to the Garden located at the end of Luluku Road in Kane'ohe.

We will meet at the Visitor's Center at 9:15 a.m. For reservations and further information, call Mary Gaber at 247-0104. Suggested donation, \$2.00.

Forest Bird Photo Show at State Library

If you have never seen a Maui 'Alauahio (formerly Maui Creeper), Maui Parrotbill, the 'Akikiki from Kua'i, you have a chance to see these and other forest birds. The Dept. of Land and Natural Resources' Forest Bird Photo Show, that has been traveling around the islands, is now on display at the State Library through the end of April. This is a great opportunity to learn more about Hawai'i's unique bird life.

April 1999

'ELEPAIO

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Calendar of Events

Thursdays, April 1 and May 6

Education Committee: Monthly meeting, 7 p.m. at BaLe Sandwich Shop in Manoa Marketplace (near Safeway). For more information, call Chairperson Wendy Johnson, 261-5957.

Mondays, April 12 and May 10

Conservation Committee: Monthly meeting at the HAS office at 5:45 p.m. For more information, call Chairperson Dan Sailer, 455-2311.

Mondays, April 12 and May 10

HAS Board meeting: Always open to all members, 6:30 to 8:30 p.m. at the HAS office.

Saturday, April 17

Field Trip to Ho'omaluhia Botanical Garden in Kane'ohe (see article in this issue, pg. 23). We'll be seeing flocks of introduced birds such as Common Waxbills, Chestnut Mannikins, Java sparrows, both species of Bulbuls and White-rumped Shamans. We'll also try to sneak up on the Black-crowned Night-herons that live in the Garden. For reservations

and further information, call Mary Gaber at 247-0104. Suggested donation, \$2.00

Saturday, April 17

Second annual Black Point cleanup, 9 a.m. to noon. Meet at the corner of Papu Circle and Kaiko'o Point (look for orange signs along Kahala Avenue). Black Point is one of the last remaining nesting colonies for the Wedge-tailed Shearwaters. We need your helping hands! To volunteer, or for more information, call Dan at 455-2311 evenings, or email him at dnsailer@aol.com.

Monday, April 19

Program Meeting: David C. Duffy, leader of the Pacific Cooperative Studies Unit, will give a slide-illustrated presentation entitled "An Oil Spill Ran Through It—10 Years After the Exxon Valdez Oil Spill." Dr. Duffy is a botanist and an ornithologist specializing in seabirds. The meeting is from 7:30-9:30 p.m. at Bishop Museum, Paki Hall Conference Room. Refreshments provided; HAS publications, tapes, patches and T-shirts available for purchase. See you there!

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