THE ELEPAIO

Journal of the
Hawaii Audubon Society

HAWAII AUDUBON SOCIETY

For the Better Protection
of Wildlife in Hawaii

VOLUME 17, Number 4 October 195

HENRY WETHERBEE HENSHAW

By Miriam E. Sinclair

Henry Wetherbee Henshaw may be of interest to us locally chiefly because of the t years he lived in Hawaii; but the major events of his life and his greatest contribu- tions to American natural history were set in the United States proper. He was one o the leading field ornithologists of the latter nineteenth century, a period when in- terest in ornithology was advancing in America in seven league boots. He knew not onl ornithology but was versed in ethnology, herpetology, "wayside botany," and other natu history fields.

He was born on March 3, 1850, in Cambridge, Massachusetts, the youngest of seven children, of stock tracing back to the Mayflower on his mother's side; and, despite being dogged all his life by ill health, he died an octogenarian. He never married.

His love of nature developed early and in many directions. He himself attributed it to his mother's influence, but mentions, besides, that his childhood home "overlook the marshes and tidal basin of the river Charles," where as a boy he used to dig clam and play Indian along the banks. A little later he turned to roaming the countryside and to hunting and collecting birds with William Brewster, whom he met as fellow stude on entering Cambridge High School, in 1865. From Brewster, who, incidentally, became a life-long friend, Henshaw learned to stuff birds, a technique which both soon deser however, in favor of the bird skin. In 1868 he was almost weaned away from interest birds by association with R.E.C. Stearns, conchologist; but birds won over shells. Earlier, snakes, butterflies and moths had in their turn fascinated the boy Henry; always, however, birds remained his dominant interest.

In 1869, a few months before he was to take his examination for Harvard, his heal broke, not for the first time, and he postponed college. Instead, being invited by a Captain Frank Webber to spend the winter in Louisiana on the Coast Survey schooner "Varina," he seized the opportunity to improve his health. It was evidently a varied experience, but fostered his interest in birds. The party were "shipwrecked" when th vessel tore a deep rent in her hull on a snag; ultimately in the repaired bottom they reached the principal area of their survey - the vicinity of Lakes Borgne and Pont- chartrain. Collecting specimens among the bayous in his free moments, Henshaw took home about 200 bird skins from this expedition.

It was the spring of 1870 when he returned to Cambridge. Now, although improved in health, he abandoned the idea of college for an outdoor life. In this he was companioned by Brewster, whose weak eyesight prevented him, too, from going to colleg

A small coterie of bird lovers had been gradually drawing together - Henshaw, Brewster, Ruthven Deane, Henry Purdie, W.E.D. Scott, Ernest Ingersoll. Finally, in 1873, together with a few others, they became the "Nuttall Ornithological Club," the

ancestor of bird societies in America. Out of this organization one can trace a tenuo thread, but a thread, nonetheless, that leads to the founding of the American Ornithol gists' Union in 1883 (and its publication, "The Auk"), then later (1885) to the Divisi of Economic Ornithology in the Department of Agriculture, and to the Bureau of Biologi cal Survey (1885), and eventually to today's Fish and Wildlife Service (1940). The first meeting of the A.O.U. appointed "The Committee on the Protection of North Americ Birds;" in time this evolved into the National Association of Audubon Societies.

The months at the end of 1870 and beginning of '71 Henshaw spent in Florida on a collecting junket with C.J. Maynard (collector and dealer) and his wife and a friend. Here his health benefited again, and his collecting yielded him some prizes, among the being several Carolina Paroquet, a species which subsequently became extinct.

Just prior to this trip, on August 27, on Long Island in Boston Harbor, Henshaw took the first specimen of Baird's Sandpiper ever known to occur east of the Mississip Roundaboutly this led to acquaintance with the great Spencer F. Baird, and seemingly affected the course of his life, for in 1872 he was offered the chance through Dr. Bai to accompany the Wheeler Survey expedition to Utah as natural history collector. He collected not only birds but "mammals, fish, reptiles, insects, and even plants." Summer and fall, from then till 1879, Henshaw journeyed West with the survey; winter and spring he sat behind a desk in Washington writing up the reports of the summers' findings. The confinement of desk work irked him; he fretted for his life in the open

This was an important period for the information it furnished on avian life in th West. In '73 Henshaw discovered that the Williamson and Brownbacked woodpeckers were not two but one species, male and female. Particularly productive was the 1874 season His fellow ornithologist and friend, Edward W. Nelson, writing after Henshaw's death says: "Henshaw's field work in Southern Arizona during the summer and early fall of 1874 was the most notable he ever did, as he collected several birds previously unknow within our limits and made interesting observations."

In a succession of seasons Henshaw's excursions with the survey ranged over the West from the 100th meridian to the coast. Henshaw observed and collected, so far as an expedition organized primarily for geographical exploration and making reconnaissan maps permitted. Already skillful, he could prepare a bird skin in record time with either a collecting box or the saddle of a restive mule as work table. He won the admiration of Apache Indians with whom he came in contact for his facility with the collecting gun. And, as he whimsically phrased it in a letter: he shaved his scalp clean "to lessen its market value." He throve on the rugged outdoor life.

The work with the Wheeler Survey ended in 1879. At this time the U.S. Geological Survey was formed, in which were merged the various surveys that had been functioning in the West under leadership of Wheeler, Hayden, Powell, and King. Henshaw accepted the invitation of Major Powell to join the Bureau of Ethnology, which was then being organized. So for a time he was burdened with administrative duties, which he dislike But these were alleviated periodically by field trips to the West and by a short leave of absence for ill health in 1883.

Through the years Henshaw had built up a large private collection of birds and eggs. This collection, with additions by C. Hart Merriam and E.W. Nelson, was acquire by the British Museum in 1885, where it evidently gave the British a solid opinion of the progress of American ornithology.

Although he could no longer concentrate on ornithological pursuits, Henshaw manag to continue them as a sideline on the seasons he spent in the West in the eighties and early nineties gathering linguistic data on the Indians for the Bureau of Ethnology. In the late eighties Powell wanted him to become Chief of the Bureau, but Henshaw de- clined. He was a very modest man, sensitive to criticism, and reluctant to assume authority over his associates, Nelson says.

These were busy years. From 1883 to '91 he was a member of the Council of the A.O.U.; from 1891-94, and again from 1911-18, the society's vice-president. He repeat edly declined its presidency. He belonged to the Cosmos Club. From July, 1889, to 1893 he was editor of "The American Anthropologist."

In 1891, following a bout with grippe, his health "gave way completely" and he wa for a time "unable to do work of any kind." From '91 to '94, whenever he was strong enough, he devoted most of his effort to collecting linguistic materials on the Indian In '93, however, he had to request an indefinite leave of absence; and the next year, in December, he sailed for Hawaii on the "Annie Johnson" - the barkentine which many oldtimers here can still remember. He landed at Hilo. There he lived until 1904.

When Henry Henshaw arrived in Hawaii, he was too ill for any activity whatsoever. Gradually health returned. One reads how he first took up photography as he regained strength, and in fact, became a photographer of parts, with a predilection for water-falls, seascapes, and strange plants, then how he gradually reverted to ornithology as returning strength permitted him to roam and penetrate the dense Hawaii forests to whi the native birds had already retreated. His field experience was confined almost exclusively to the island of Hawaii.

It is an interesting sidelight to learn that he became a citizen of the Hawaiian Republic, only speedily to regain his American citizenship upon Annexation. This Hawaiian citizenship makes him seem particularly one of ours. His appreciation of the Hawaiian atmosphere is also winning: "Here, where no man is treated as a stranger, bu always as a welcome guest, is found the kindliest climate in the world, beautiful scenery on all sides, and a contentment with life unknown in less favored regions."

From the first he was interested in native Hawaiian birds - their identity, their habits, their possible origions, their scarcity - particularly in the lowlands. So scarce were they here that during his first year he didn't see any, not one. In cours of time, chiefly from ranging the forested areas, he made a collection of 1100 skins, which in 1904, shortly before he returned to the mainland, he sold to the Bishop Museu There it is today. He published in the 1902, '03, and '04 issues of the Hawaiian Annu and also in separate book form (at a dollar a throw) "Birds of the Hawaiian Islands," a compact little volume which he hoped would put bird lore into the hands of the many, the previous large and magnificently illustrated works on the avifauna of this general area by Wilson and Evans and by Rothschild being exceedingly expensive and available only to a very few. Despite its unpretentiousness, his is an unusually interestingly written manual.

He wrote numerous notes and articles for "The Auk" and "The Ibis" on native Hawaiian birds and on the migrants that frequent the islands. There are particularly interesting articles on the elepaio (Auk, July 1902) and on the migration of the Pacif golden plover (Auk, July 1910).

He promoted protection of Hawaiian birds. Although the law he pushed failed to pass the Legislature (circa 1903), being "killed by Honolulu sportsmen, particularly one" (whom he does not name), a similar law was subsequently enacted. He was much concerned by the diminishing numbers of the indigenous birds, and speculated considera on the causes, since apparently he felt their disappearance was due not so much to depredations by sportsmen and commercial hunters as to "some obscure cause" or "combi-nation of causes." He did not seem to think the imported mongoose, finches, mynah, etc. sufficient explanation for the rapidity in decrease of the native bird population He was firm in the opinion, however, that importation of birds should be under govern-ment supervision, and he suggested types which should not interfere with the ecology here.

While in Hawaii he also became interested in "tree and land shells," collected an studied them, and planned to produce a book on them; but his writing on tl subject consisted of one short paper contributed to the Journal of Malacology (IX,1904,pp.56-6

Ornithologically speaking, four points stand out in his Hawaiian sojourn: his interest in Hawaiian birds, his efforts for their preservation, his articles and popularly priced handbook, and his collection which was obtained by the Museum.

In 1904, with health restored, Henshaw returned to the mainland ready for work with the government once more. On June 1, 1905, he became Administrative Assistant in the Biological Survey, and in December, Assistant Chief, under Dr. C. Hart Merriam, who had been a close friend since they first met in 1872. When the latter resigned in 1910, Henshaw succeeded him. This position he held until 1916, when he resigned because of failing health.

During Henshaw's service in the Biological Survey, considerable had been accomplished - notably, development of economic phases of its activities (particularly control of pest species of birds and mammals), establishment of sixty-seven bird reservations and five big-game refuges, the enactment of the Federal Migratory Bird Law, the signing of the Migratory Bird Treaty with Great Britain, near-elimination of traffic in bird plumage, and publication by the Department of the beautifully illustrated "Fifty Common Birds of Farm and Orchard," authored by Henshaw (Farmers Bulletin 513). This article (under a new title: "Birds of Town and Country") and two others by him also illustrated by Louis Fuertes were later printed in the National Geographic Magazine (May, 1914; August, 1915; and April, 1917); subsequently, combined in book form, they were republished by the National Geographic Society. The articles served their purpose: they interested many people otherwise uninterested in birds, and thus they aided in conservation.

Shortly after his return from Hawaii to Washington, Henshaw had become interested in diatoms, and through Dr. Albert Mann, who became the firm friend of his later years, he had learned to mount them on slides. He became enthusiastic about microscopy and diatoms - fascinated by their beauty and delicacy of form. This, it appears, was the chief interest of his declining years. He built up a collection of several thousand slides, which included some rarities and some new to science. This he willed to Harvard. Although he kept in touch with the Biological Survey's affairs, as consulting biologist, his active life as naturalist had passed its peak. His health steadily declined, and after a long illness he died on August 4, 1930, in Washington, D.C.

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Principal Sources

1. Condor - May 1919 to May 1920 - "Autobiographical Notes" by Henry Wetherbee Henshaw
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3. Auk - October 1930 - pp. 600-601 - (obituary) "Henry Wetherbee Henshaw"
4. Auk - January 1920 - pp. 1-23 - "In Memoriam: William Brewster" - by Henry Wetherbee Henshaw
5. "Birds of the Hawaiian Islands" - Henry Wetherbee Henshaw

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CENSUS OF THE TERNS ON MANANA OR RABBIT ISLAND, May 30, 1956
Taken by Grace Gossard, Grenville Hatch, Shoyo Kojima, and Al Labrecque

	Estimate eggs and a few young	Estimated adults
Common noddy tern	?	10,086
Sooty tern	16,878	33,956

The above estimates must be considered as extremely rough, and are undoubtedly gross underestimates. The totals arrived at are less than those of two years ago, when Dr. Frank Richardson and Grenville Hatch estimated the terns on May 30th, although

certainly there appear to be more birds there today than in 1954.

We attempted to follow the same pattern as the count in 1954. The populations on the southern end were counted and estimated first. Then we proceeded to the western slope, then to the saddle, and along the entire crater rim.

Egg counts were made in areas of 100 square yards along the western slope, other counts were made along the crater rim, and the area then used as a unit in estimating eggs in the adjacent area. In other sections adult birds were counted and estimated. Noddies were particularly difficult. Most of the sooties had either eggs or very young chicks (several were hatching under our eyes) but many of the noddies apparently had not yet laid. Concentrations of noddies on the inaccessible eastern slopes were at such a distance, and so blended in with the background that it was hard to make a reasonable estimate, even with binoculars. This difference in the progress of nesting would agree with the observations of our Hawaiian boatman, who told us he had observed the first sooties arriving, an estimated 12,000 of them, in the late afternoon of March 24th. The first noddies appeared in the late afternoon of March 29th.

We made no effort to count shearwaters. The western slopes below the crater rim seemed to be well populated, judging from the number of freshly made burrows, and from the occasional moans we heard issuing from them. We did not descend into the crater itself.

Vegetation was heavier and greener than I have ever observed on the island in occasional trips since 1940. The wild tobacco has reached a height of several feet, and bears large heavy dark leaves. The coconut trees which were planted years ago are beginning to bear, though much stunted.

A few rabbits were seen, and the quantity of droppings indicated the presence of many others.

One Bulwer's petrel was found in the shallow cavern at the north end of the island in the same place where they have been seen in past years. The bird was at the end of a deep crevice, and from its immobility, we assumed that it probably was incubating.

Approximately 5½ hours were spent on the island, from 8:00 a.m. to 1:30 p.m. The day was overcast, with a good breeze blowing.

From the state of progress of nesting, we came to the conclusion that permits to visit Manana should be issued not later than Memorial Day, if the young are to be protected. We exercised the greatest care, but it is impossible to move about without disturbing the young terns, and constant watching of the ground is necessary if eggs are not to be crushed. Any date later than this would seem to us detrimental to the welfare of the birds.

Grenville Hatch

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CARDI: (A KENTUCKY CARDINAL)

By Eleanor Westendorf

Continued from September issue

His development on the tenth day was fabulous. He loved to perch on a finger and hang tight when we tried to return him to his cage. He began flying from one to the other of his admirers in the house, and when held close to our faces he'd give baby kisses around the mouth and nose all the while talking his baby bird talk. He tried so hard to be friendly with the two parakeets that have freedom of the house, but they were afraid of him and would often give him a peck which never seemed to dampen his ardor. As time passed the three became very good friends and shared the top of the parakeet cage that occupied an enviable place in front of a large screen window over-

looking the kukui tree and patio beneath. After Cardi learned to eat by himself he shared the parakeets' millet and played on their play pen.

From the fifteenth day on Cardi's flight development progressed rapidly each day. At first he flew a few feet in the bedroom, but was never sure of his landing and ofte he fell to the floor when attempting to light. His misjudgment never discouraged him and he'd continue trying for perfection. It was not long before he delighted to fly from the bedroom and light with feather-like softness on the shoulder of the one busy at the kitchen sink. He never failed to frighten the person who did not feel him [illegible] and did not know that he was near until a tweak was felt on the ear lobe or hair had been pulled. I'm sure he chuckled inwardly when a shriek was audible. The jump and yell never caused him to fly away.

On the eleventh day Flash appeared with a female and carefully showed her the fee ing tray full of sunflower seeds in the kukui tree. All that day he fed Cardi at intervals from 6:15 a.m. until 7:00 p.m., and from that day on we knew definitely that the feedings became gradually less and less frequent. On the thirteenth day Flash fed the baby only twice, once at 6:30 a.m. and again at 3:30 p.m.

Flash checked Cardi daily to be sure of his safety up until the twenty-eighth day when he came to the feeding tray with one leg hanging. The once proud, alert, happy fellow had lost all his fight and his crest literally had fallen. With great difficul he got a sunflower seed for himself and then flew to a large limb of the kukui tree and lay on it with his leg hanging off to one side for a long time resting from exhaustion, pain, and sadness. From then on Flash came daily for his own seeds, but Cardi was ignored. Cardi never ceased to put up a terrific wail and fluttered wildly, whether he be in the house or on the Deck, whenever Flash was around. Over a month later Flash was able to rest his injured leg on the feeding tray, but it stuck out at an acute angle from his body. Today we do not know if his leg returned completely to normal or not. We see an old scarred Kentucky cardinal occasionally and rather think it is he. We like to think it is and that his leg is well and useful.

Of course, Cardi's supplementary feedings were increased as soon as Flash came no more. He relished most his raw meat which was still being put through the garlic press. On the sixteenth day Flash checked on Cardi's welfare three times, but never fed him regardless of baby's pleas. When Flash was not around Cardi preferred to be in the house with his human admirers. He made his wants known by beating around in his cage. At this point he was well finger trained and hopped on an outthrust finger wherever he might be.

We believe birds do have taste buds for Cardi never failed to run his tongue out and around his bill whenever he was presented with raw meat or a body of a moth. On the seventeenth day the thick yellow tissue that outlined his beak started to shrink. On this day, too, he discovered the water in the cup in his cage (water was given to him with a medicine dropper before). He stuck his head in so many times we lost count We believed he was trying to take a bath for he'd shake his dripping head furiously an repeat the performance. He swallowed far more than we realized and shortly the water shot out of him like a miniature geyser. Then we were worried and gave him Geisler's First-Aid Tonic which soon stopped it. This day he discovered his toes for the first time like a baby and was most curious. He grabbed at them with his beak and pulled so hard once that he fell over on his back. He tried hard to preen his motheaten feathers His oil gland always seemed too far away for him to reach. His tail consisted of five feathers spread far apart. There were no feathers under his wings and a wide skin bar still showed when he stretched his neck. When at ease he looked soft as though his body were covered with down. Prior to this date he always sat calmly while the surplus Pablum was wiped from his bill with kleenex. Now he wiped his own bill with the kleenex that was placed under his dish to keep the bed spread clean during feedings. He was fed at this stage about every half hour, but nothing brought on his baby chripings like the raw meat. He seemed to relish it above all other food. Grit was kept

in the bottom of his cage always and he had free access to the parakeets' gravel, but at no time did we ever see him eat it.

On his eighteenth day he became most interested in his surroundings. He played with a red pencil for awhile, picked at my aloha shirt and the red buttons seemed to fascinate him. He flew to a lap board where a game of solitaire was going on and annoyed the player by picking up the cards; when a book was being read he delighted in trying to turn the pages before the reader was ready. He tried for the first time to open a sunflower seed. He worked on it for a long time, but never succeeded. The parakeet was very jealous when he saw Cardi taking the lime-light. Butch, the parakeet mentioned, walked up to him with a determined air and nipped at his baby feathers and tail. After two nips Cardi turned on Butch with a hiss like that of a wild kitten, which ended for good any interference. Later the two parakeets and Cardi became close friends and all three would sit for long periods together on the wire cage in front of the big window (ceiling to the floor). Cardi loved to stand in a sunbeam that chose to spread its beam on the floor near the window. He delighted in puffing out his feathers and allowing the sun's ray to reach his body. He rolled from one side to the other and enjoyed the warmth for long periods at a time.

On the thirty-third day we saw some rust color showing on the baby's breast feathers. We hoped that it meant a brilliant red male plumage would develop later. His tail was still ragged and his legs were stilt-like. His eyes were big and expressive and curious. It was interesting to note that to see anything on a level below him he had to cock his head and get his eye parallel to the object in question as though the eye itself could not move. Today he tried hard to take a bath in a small feed cup on the desk. He sat in it and managed to get quite wet along with the nearby wall. We offered him a larger dish of water, but the ocean-like vastness to him was frightening.

By the thirty-eighth day he was flying from one room to another like a jet. He was very sure of his landings now and loved to perch on high window ledges and tops of doors. His favorite resting place was a floor lamp shade. He came to get his food when called, even from another room. He was making a nuisance of himself by grabbing the pen point when we tried to write letters. He loved to spread the solitaire cards around. He seemed to think his place was on our chests when we decided to take a nap. He would no longer stand on a table or a bed when fed. He had to sit on an arm or hand which made feeding most difficult. He took his lice and mite powdering without protest, and delighted in resting on his back with his feet in the air in the palm of our hands. Much to the parakeets' disgust Cardi became very affectionate with them. He walked up to Butch one day and tried to kiss him. He followed through with it until Butch was backed off the top of his cage.

His diet now consisted of raw meat, Pablum, wheat germ oil, Cod Liver Oil, finch mix, parakeet mix, sunflower seeds, raw apple, greens, and a moth or caterpillar when we could get one. He was able to crack his own seeds.

Twice after this period of his life when we thought he was grown up he accidentall got out of the house. The first time the dog opened the screen door, and being a sliding one it remained open. Panic reigned in the household when we discovered Cardi was out in the cold hostile world. We started our search and soon saw him in the kukui tree walking from limb to limb and then up on the roof of the house. He was called and he flew down on the Deck railing beside us and without protest he was picked up and brought into the house. The other time was a week later,and when his absence was realized, we found him on the Deck under a chaise longue. Again without any fuss on his part he was picked up and returned to the house.

On May 25, 1956, the fifty-seventh day of life and our joy, Cardi was found, on his side, dying, at 3:10 p.m. on the bedroom floor. He was buried under an ever-blooming hibiscus bush near the kukui tree and patio that he loved. Fifteen minutes

prior to his death he had shown no signs of illness. We often wonder if his jet-control failed to work and he flew into the window near where he was picked up. Even at this late date the household is not the same without him.

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FIELD NOTES:

Field Trip to Kawaiiki on August 12, 1956

Kawaiiki is a beautiful, shaded, well graded tropical trail, and a veritable paradise for botanists, as many unusual indigenous and exotic plants and trees are found in the area. Ieie grows in abundance, and many were in blossom. Tom Maguire, our leader, pointed out mamake, kopiko, dianella, maile, clermontia, aheahea, kolea, halapepe, papala, and many other plants until our heads were swimming with Hawaiian names. Thimble berries, bananas, ripe guavas and strawberry guavas were found, and ripe avocados were seen, but out of hands' reach. The ohia was in bloom so we anticipated apapane, and were disappointed that there were none, since amakihi, with whom they are frequently associated, were common. This re-emphasizes how worth while it would be if an ecological study could be made of our Island birds and some of the mysteries of their habits and distribution could be understood.

Count for the day:

Amakihi ------ 15	Leiothrix ------ 22
Apapane ------ 1 heard	Linnet ---------- 1
Elepaio ------ 15	Ricebird -------- Very common, particularly at the head of the trail
	White-eye ------ 35

Grace Gossard

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OCTOBER ACTIVITIES:

FIELD TRIPS: October 14 - To Pa Lehua. This trip provides magnificent views of both sides of the island, as well as good birding. Meet at the Library of Hawaii at 8:00 a.m.

October 28 - Shore birds. Our destination will depend on tide, and on reports of where the best birding may be found. Meet at the Library of Hawaii at 8:00 a.m.

MEETING: October 15 - At the Aquarium Auditorium at 7:30 p.m. The program will be announced in the daily papers.

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