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PUBLIC HEARING SCHEDULED FOR THE MAUNA KEA PLAN By Mae E. Mull

Persuasive arguments by the Hawaii Audubon Society and others have convinced the Board of Land and Natural Resources to hold an official public hearing on the draft Plan for Mauna Kea. The public hearing is tentatively scheduled to be held in Hilo on Friday, November 12, 1976, at 6 p.m. in the County Council Room of the County Building. The official notice will be printed in Honolulu and Hilo newspapers at least 21 days in advance of the hearing date.

The public hearing will be held to receive public testimony and comments on the 10-page, 3rd draft of the Mauna Kea Plan submitted to the Board by the DLNR staff and officially released for public comment on September 16, 1976. The current draft "constitutes the recommendation" to the Board by the Chairman of the Board, the Deputy Director of DLNR, the State Forester, and the Directors of the Divisions of Fish and Game and State Parks. These officials signed the current draft plan.

The present draft has been altered and refined from the two previous drafts to reflect a greater concern and responsibility by DLNR to conserve and protect the unique natural environment of Mauna Kea. Five management areas are delineated appropriate to specific uses or combination of uses. Wherever two management areas overlap, the more restrictive use limitations will apply. Following is a gist taken from language in the draft:

1) Māmane/Naio Forest Ecosystem Management Area--This area will be managed primarily to maintain and improve the native Hawaiian Ecosystem and the threatened and endangered species found therein. Management of the forest ecosystem will be primarily the responsibility of the Division of Forestry. The Division of Fish and Game will have secondary responsibility for management of the wildlife components of the ecosystem.

Protection efforts will include the prevention of destruction by exotic animals. Hunting seasons will be designated as year round for feral sheep and goats and, if necessary, removal by the staff will be accomplished in order to eliminate these species within a three-year period. Mouflon sheep will be managed for public hunting unless studies show that it will be necessary to eliminate this species to assure ecosystem viability. The hunting of feral pigs and game birds will continue as at present.

Specific efforts to improve the forest ecosystem will include planting potted māmane seedlings, grass--preferably the native bunch grasses, and constructing erosion check dams. Protection efforts will include prevention of unauthorized removal or destruction of vegetation (especially the less common species), control of off-road use of vehicles, and prevention of littering.

2) Science Reserve Management Area--Application for any proposed telescope beyond the existing and approved telescopes shall be accompanied by a comprehensive justification, showing: a) Public benefit to the people of Hawaii, in terms of employment opportunities, educational pursuit, and overall economic development; b) Public necessity in terms of cooperative use of facilities and overall advancement of science and research; c) Evidence that Mauna Kea is the only suitable site for such facility.

Winter snow play and skiing will be permitted at appropriate summit areas. Portable lifts, portable restrooms, and warming huts will be subject to approval under the conservation district laws.

3) Special Natural Area and Historic/Archeological Management Area--/A substantial

part of this area overlaps with the Science Reserve Management Area, including the proposed Mauna Kea Ice Age Natural Area Reserve, of which Lake Waiau is a part, and the extensive Mauna Kea adz quarry sites. This area contains unique historic, archeological, and geologic features deserving special management. Land within this area is both a potential State Natural Area Reserve, and existing National Register Historic Landmark. Exact boundaries and specific regulations for the Natural Area Reserve shall be set by action of the Board.

4) Silversword Management Area--This area consists of land now fenced off /at the headwaters of the Wailuku River/ to protect silversword plants. It will be managed as a nursery for supplying plants in interpretive areas or for future reestablishment in other areas on the mountain, should that be determined to be desirable.

5) Military Management Area--The Army shall be restricted to the existing Pohakuloa Training Area.

Special Problem areas: Hale Pohaku (a section of the Mauna Kea State Park, at 9,200' elevation)--The facility will consist of a mid-level facility for research activities on the summit, a central point for management of the mountain, and a day-use destination point for visitors. Development at Hale Pohaku will, however, remain at a level in accordance with minimum research and public needs. A master plan for the Hale Pohaku area shall incorporate plans for all intended uses at that location, and shall be prepared by the University of Hawaii in consultation with the Division of Forestry, Fish and Game and State Parks.

Summit Access Road--The road from Hale Pohaku to the summit shall not be paved but shall have road safety devices. The University of Hawaii shall be responsible for the management, improvement and upkeep of this road.

Power--On-site generators shall be used to supply electrical power for the observatories and support facilities on Mauna Kea. These generators shall incorporate emission control devices so as to reduce air pollution to the lowest practicable level. Alternatively, underground power lines may be installed.

The Hawaii Audubon Society strongly supports the primary focus of the plan on the recovery of the māmane-naio forest and its threatened native species. The Palila Recovery Team has defined the whole Mauna Kea Forest Reserve encircling the mountain as critical habitat for the survival of the endangered Palila. Other endangered Hawaiian birds with recorded Mauna Kea habitat include 'Akiapola'au, Hawaii 'Ākepa, 'Ō'ū, Nēnē, 'Io (Hawaiian Hawk), and 'Ua'u (Hawaiian Dark-rumped Petrel). In addition, about a dozen endemic Hawaiian plants with Mauna Kea habitat are in the process of being officially declared endangered species by the U.S. Department of the Interior.

Rehabilitation of the forest ecosystem requires the removal of the feral sheep and goats that have been maintained on Mauna Kea for sport hunting. We applaud the plan to eliminate these destructive mammals from the mountain within a three-year period.

The restrictions on new telescopes, requiring a comprehensive justification for each one, is a vast improvement over the two previous drafts that set no standards for development of observatories at the summit. Previously, the Mauna Kea Advisory Committee, the County of Hawaii and the Society have recommended a five-year moratorium on new telescopes.

Concerning development of the State Park at Hale Pohaku, the County of Hawaii takes the strong position that the master plan for that area should be prepared by DLNR, instead of the University of Hawaii (Institute for Astronomy). The County position gives desirable emphasis to State Park uses at Hale Pohaku, including interpretive services, day-use for visitors and primitive overnight facilities. If the plan is prepared by DLNR, the mid-level facility for astronomers is more likely to conform to the minimum needs for altitude acclimatization.

The Mauna Kea Advisory Committee, the Society and others have called for on-site generators with scrubbers to supply electrical power to the summit and facilities at Hale Pohaku. The current draft plan adopts this recommendation as the preferred energy source.

Copies of the current draft Mauna Kea Plan can be obtained from the Department of Land and Natural Resources, 1151 Punchbowl Street, Honolulu, Hawaii 96813. Hawaii Audubon Society members are urged to present their comments on the plan in person at the Hilo hearing on November 12, or mail their written comments to Mr. Christopher Cobb, Chairman of the Board of Land and Natural Resources, at the above address. You may comment only on those aspects of the plan that are of particular concern to you. It is anticipated that

Hawaii Island sheep hunters and their allies will give forceful testimony to keep the existing sheep herd and hunting areas, or to retain sheep hunting in at least 75% of the māmane forest. If you believe that feral sheep and goats should be removed from Mauna Kea in order to protect and restore the māmane ecosystem and its endangered species, please send your views to Mr. Cobb. Public opinion will have a significant influence on the decisions made by the Board. Every voice on the side of conservation urgently needs to be heard loud and clear on this crucial issue!

The following points of view are from HONOLULU STAR-BULLETIN, 10 April 1976, page A-11; Paiko Lagoon as Sanctuary by Andrew J. Berger: I write because editorials and other media statements regarding Paiko Lagoon as a sanctuary for birds typically have contained errors of fact and/or misrepresentations and insinuations. It is my considered opinion that anyone who uses birds as a reason for opposing the construction of one more house at Paiko Lagoon is either uninformed or intellectually dishonest. I am uninformed as to the legal and political aspects of the argument and have nothing to say about them. I do write with assurance about Paiko Lagoon as a wildlife sanctuary, however.

1. I believe that it was a mistake to declare Paiko Lagoon a wildlife sanctuary because it was recognized to be of secondary importance to the birds that feed there. In attempts to preserve environment and rare and endangered Hawaiian plants and animals, it is essential to establish priorities. In this instance, considerable sums of money were spent on an area of very low priority for the welfare of the Hawaiian stilt and other waterbirds. William P. Mull, then vice president of the Hawaii Audubon Society, so testified before the Senate Committee on Ecology, Environment, and Recreation on February 9, 1971. Moreover, both State and federal biologists also view Paiko Lagoon as of secondary importance to the stilt, and it seems certain that the waterbird recovery team appointed by the director of the U.S. Fish and Wildlife Service will have to reach the same conclusion simply because of the biological facts. It is common knowledge that the mere passage of a law or the enactment of a regulation does not automatically create the desired results. Calling Paiko Lagoon a "wildlife sanctuary" doesn't mean that, in fact, it is serving as a sanctuary. If one wishes to establish a sanctuary for any kind of bird, one first has to know the needs of the bird and then has to try to satisfy those needs. If the needs are not provided for, the effort certainly will be futile.

2. A critical factor in the survival of the Hawaiian stilt is the availability of nesting areas that are safe from predation by mongooses, dogs, and cats. Neither the stilt nor the black-crowned night heron has ever been known to nest at Paiko Lagoon. The islands constructed as potential stilt nesting sites probably are useless, only in part because they were not built as designed by personnel of the Division of Fish and Game. There is virtually no chance for the successful nesting of stilts on the present islands (even if the birds decided to lay their eggs there), nor is there any certainty that stilts would accept for nesting new islands that were constructed where they should have been placed.

3. The stilt, the heron, and the wintering shorebirds inhabit Paiko Lagoon for one reason only: they find food there. The birds are habituated or accustomed to houses, people, and noise. (Because of the prevailing trade winds, most of the noise at the lagoon originates on the mauka side of the Lagoon!) If those factors bothered the birds, they wouldn't feed there, but they have used the area since the first house was built on the shores of the lagoon. There has, however, been a drastic decline in the use of the lagoon by the stilt and other waterbirds, but the decline is not related to the houses around the lagoon. The striking reduction in numbers of birds has occurred especially since 1973, when the State "improved" the area. This decreased use has been documented in the 'ELEPAIO, the journal of the Hawaii Audubon Society, during the past decade, and no stilts were observed during the annual Christmas count of the Society during December 1974 or 1975 (30 birds were seen there on December 28, 1969). We do not know the reason for this decline because no studies on water quality or food organisms have been conducted since the lagoon was dredged to make it a sanctuary. The recent assertion (made on a TV newscast) that the stilts have left Paiko Lagoon because of the onset of construction of Mr. Inaba's house is ridiculous, and is an example of statements made by people with an inadequate knowledge of the birds concerned. Mrs. Marie Tseu, who lives on the shores of Paiko Lagoon, pointed out in the September 1975 issue of the 'ELEPAIO that most of the stilts appear to leave the lagoon at certain times of year, presumably to nest elsewhere. Hence, she saw no stilts at the lagoon during March and April 1974 nor between February

and May 1975. I recognize that Mrs. Tseu did not make an intensive study of the stilts at the lagoon. Nevertheless, the stilts have not left the lagoon in recent weeks because of work on the house. I suggest that interested persons go to Paiko Lagoon and observe the bird activities when construction is in progress. They will find that the birds feed and rest oblivious to noise or building activities.

4. Before spending more money on an area that is a "sanctuary" in name only, it would seem logical to withhold action until publication of the official Hawaiian Waterbird Recovery Plan that will detail priorities and methods for saving the Hawaiian stilt and other endangered waterbirds.

14 April 1976, page A-19; Reasons for Paiko Lagoon Sanctuary by Robert J. Shallenberger:

Since the inception of the Paiko Sanctuary concept nearly 20 years ago, two important objectives have been fundamental to the project: (1) the protection and improvement of the Lagoon for its waterbird value and (2) the improvement of opportunity for public educational use. This, in fact, is the basis for the "nature park" concept that has been a part of all related legislative action in the last decade.

Of particular relevance here are the numerous islands within the Lagoon that were constructed by the State specifically to encourage nesting by the Hawaiian stilt. Other objectives, such as stench removal and area beautification, have also figured in improvements during recent years. In some cases, these objectives conflicted with the sanctuary plan and appear to be responsible for, at least, some discrepancies in the existing topography of the lagoon when compared to the original sanctuary plans presented by the State. Yet, despite these problems, I strongly disagree with Dr. Berger's belief that there is "virtually no chance" that the existing islands will be used successfully by nesting stilt in the future.

It is important that a distinction be made between feeding and nesting stilt in this area. Dr. Berger is correct in his reference to the lack of nesting to date, but ignores the fact that planning, funding, and development of the lagoon as a sanctuary have been undertaken with the objective to encourage stilt nesting. With that in mind, the impact of the construction and future use of the house in question must be related to the lagoon both as a feeding site and as a potential nesting site for the Hawaiian stilt. I would like to present information resulting from field work which strongly suggests that a permit to construct this house should not have been granted.

1. Scientists involved in animal behavior study often use the term "approach distance" to describe the distance at which an animal will take flight (or run) from an approaching predator. With stilt, the approach distance for nesting birds (with man as the potential predator) is typically much greater (often two to three times) than the approach distance for feeding birds. In other words, nesting birds are more quickly disturbed from their nests than are feeding birds from their feeding sites.

2. The approach distance for feeding and nesting stilt is related to the availability of an avenue of escape. In other words, stilt will generally take flight sooner (as a man approaches) if the direction of escape is limited. Construction of a house and future disturbance at that site in Paiko encircles the major feeding and potential nesting sites which were formerly free from human habitation on most of the makai boundary.

3. Stilt often leave their nest sites before they are visible to an intruder, so disturbance is often unintentional. Movements in the air and loud calling by the nesting birds will usually disturb other stilt nesting within close range (say 40 to 50 yards). In an area like Paiko Lagoon, where nesting islets are so close together, disturbance of birds which may nest at the west end (near the house site) will invariably result in consequent disturbance of those which may nest on islets more removed from the site.

4. Nesting adult stilt show some accommodation (habituation) to regular, predictable disturbance, but accommodate far less readily to irregular and unpredictable disturbance. For example, stilt appear generally undisturbed by planes flying over Kahana Pond or cars passing on the nearby highway. Yet, if these birds are disturbed in an irregular fashion (i.e., sudden noise, walking approach by man, loud voices, barking dogs, etc.), then they will rarely if ever accommodate. Feeding stilt will accommodate to a much greater (and closer) level of disturbance than will nesting birds.

It should be pointed out, and emphasized, that Paiko Lagoon has long been considered a prime site for a wetlands sanctuary and "nature park" in large part because of its proximity to urban areas. Its educational potential is tremendous. If one were to go by

present numbers alone, there is little question that Paiko is secondary in value to the future of Hawaii's endangered waterbirds. But numbers tell only half the story. Most of Oahu's best waterbird habitat has been destroyed by urban development. Limited public support for conservation programs stems largely from an embarrassing lack of environmental education opportunity. Paiko remains the only significant waterbird area on Oahu that is readily accessible to the public and as such is a richly valuable natural resource.

In conclusion, it seems clear to me that construction of the house in question and the anticipated human activity associated with it when finished will reduce the quality of the existing sanctuary significantly and inhibit use of the lagoon by nesting waterbirds. Disturbance such as this is unnecessary and, indeed, incompatible with the sanctuary concept.

By Maria Tseu: It is unfortunate that in order to downgrade Paiko Lagoon as a bird sanctuary Dr. Berger, Mr. Inaba's consultant, has used my Hawaiian stilt bird counts that I keep for the Audubon Society only to the advantage of his client. (April 10) From my log, he notes the normal spring migration of the stilt but fails to note that present migration started two months earlier than normal, at the time utilities were laid for the Inaba lot, back in December, not in "present weeks" as implied.

On the other hand he leaves out my log when discussing bird populations and uses, instead, the Christmas count, which is taken on only one day for an entire year, when my counts are logged at least bi-monthly. My log also showed an upswing in 1975 from the previous post-dredging years.

23 June 1976, page A-15; Paiko Lagoon: Two More Opinions by Dave Raney: I think your editorial regarding Paiko Lagoon misses several key issues which make the dispute of more than local concern.

To quote a phrase from the last election, "the issue is integrity." Construction of a residence within the boundaries of Paiko Peninsula violates the integrity of the wildlife sanctuary and detracts from the quality of the experience of entering an area supposedly set apart for wildlife. Whether or not the house and the activity incidental to its occupancy will have an adverse effect on the nesting of the Hawaiian stilt and other birds remains to be seen, but I agree with your assessment that "it was a mistake to permit a house lot in the middle of a wildlife sanctuary."

The happening at Paiko also calls into question the integrity of the governmental processes upon which we rely for guidance of land use. If a private residence can end up in a wildlife sanctuary, how secure are other environmentally sensitive areas? Consider that Mr. Inaba had to pass through an impressive gauntlet of agencies and processes, which include State and county agencies, legislative purview, and judicial review, and then consider whether those processes were adequate to protect the public interest.

The legislation which appeared to guarantee the purchase of the entire peninsula, but in fact excluded the Inaba lot, was an exercise in deception. A deal was struck and then camouflaged from the public. When the public finally learned it had been duped, Mr. Inaba was already well on his way to proceeding with construction, and the integrity of the legislative process was (again) in question.

The environmental impact statement process is supposed to permit an adequate review by all concerned parties of actions likely to have an adverse environmental impact. By law, both the direct and indirect effects of an action are to be considered in assessing environmental effects. The EIS process was bypassed, however, by the Board of Land and Natural Resources' narrow interpretation of the EIS law and its decision to permit Mr. Inaba to run his utility lines through conservation land without an environmental impact statement. The action by the Board of Land and Natural Resources was challenged in court and was subjected to a judicial review, but the judge permitted construction to proceed. Failure of the judge to grant a timely injunction tended to render further appeals moot.

The Governor's decision not to purchase the lot (and house) was disappointing, particularly by the precedent that it sets. The lesson some will draw from Paiko is that government moves so slowly that it can easily be outmaneuvered, particularly with help from the inside. The failure of the Governor to act at Paiko encourages others to use the "fait accompli" technique to achieve their ends. Considering the broader implications of the issue, the Governor's attempt at economy at Paiko may ultimately prove quite costly.

Now that the buck has been successfully passed at the State level, it appears that

the Mayor and the City Council have a final chance to restore the integrity of Paiko Wildlife Sanctuary. I hope they do so, and spare all of us from having to explain to our successors how we let "that house" end up in the wildlife sanctuary.

 By Margaret Titcomb: As to Paiko Lagoon, Governor Ariyoshi thinks that it is poor management to conclude successfully the long struggle to preserve the sanctuary and future park at Paiko, which all who live there, all Audubon Society members, and all conservationists have been eager to have the State acquire--through long years. He feels that the money should be spent on Malaekahana, a new project.

All of us want that lovely and useful conservation and recreation spot, or opportunity too, but it can wait until the next division of funds for parks. It will not slip out of memory or be desecrated for housing in the meantime.

It would be a shameful record for the State to fail to procure the Paiko area, even at the high cost of \$500,000, after the years of paying out funds for it that never did conclude the acquisition. If this payment is not made, the lagoon and peninsula, so useful to man and birds, will be lost forever. If the sum is paid, it will be saved forever. Why toss it away?

There has been discussion as to the use of the lagoon by birds. Even if they do not live there constantly throughout the year, at least one of them, the rare stilt, moves about during the seasons, frequenting Paiko many months of the year. We have lost some of the areas for such birds: Kahuku ponds, Kuapa Pond (at Hawaii Kai), and Kaelepulu (Enchanted Lake) for stilt. Conservation is a vigorous subject now. Why fail while facing one of our last chances to succeed? Paiko is virtually the only spot where the endangered bird can be seen by the public, most important, and by school children, without special permission from the military or private interests. It is the only bit of open seashore left near urban Honolulu where the stilt and other waterbirds can be seen.

All things considered, a great many of us are convinced that the loss of this opportunity would be irreparable.

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 9 July 1976, page A-20; Lessons of Paiko (Editorial): Now that City Council and Governor George Ariyoshi both have refused funds to buy a home site impinging on the Paiko Lagoon Wildlife Sanctuary, it looks as though that fight is over. The clear winner is the home owner, Rodney Inaba, who has his house and \$865,000, too. That is the amount he was paid for the rest of his land, which has been bought for the sanctuary. Before the case is consigned to the back files, at least two lessons ought to be drawn from it.

Lesson No.1 has to do with the distrust and bad feelings engendered by backstage political deals. The advocates of the sanctuary thought they had won their objective in the 1975 Legislature when an appropriation was made to buy the lagoon. Only after the session adjourned did they discover the appropriation excepted one-third of an acre from the peninsula's 3.665 acres to allow the owner to build a house. We would have much less quarrel with that exception if it had been openly debated and then decided on by the Legislature. But it was one of the many items crammed into a budget bill in the last-minute legislative conferences, and then rammed through as part of a take-it-or-leave-it package embracing hundreds of items. ...But it was simple unfairness by the legislators involved not to alert the wildlife sanctuary advocates in advance of the compromise that had been made. It poisoned the atmosphere in a way the Kuliouou Community Association is not likely to forget very soon. More openness and accountability would have avoided this. We add parenthetically that a one-house legislature would go a long way toward assuring this openness and accountability.

Lesson No.2 has to do with land speculation and soaring costs--and how they hurt the public. In 1974 the Legislature was talking of \$400,000 to buy the peninsula. In 1975, the negotiated price tag for the 3.665 acres minus the home site of 15,500 square feet was \$865,000. In 1976 the price tag for the 15,500 square feet on which a house now is partly built is estimated at \$650,000. This price by itself deterred the Governor and City Council who see more pressing money demands elsewhere. The clear message is that government should move promptly to buy open land it identifies as necessary for future use. Otherwise inflation and development can quickly put costs out of reach. One such area now identified for condemnation is Malaekahana Bay on the northeast coast of Oahu. It can be a site for a park that will be as valuable to future generations as Kapiolani and Ala Moana Parks are to today's residents. Is government going to drag its feet.../Paiko Lagoon?

Other HONOLULU STAR-BULLETIN articles are: 10 April 1976, page A-3, Land Board Slates Hearing on House in Bird Refuge by Helen Altomn; 24 April, A-3, Threat to Bird Sanctuary Argued--Conflicting Testimony on Paiko by Helen Altomn; 6 May, C-2, Paiko Home Builder Wins Another Round by Helen Altomn; 12 May, A-17, 'Pork Barrel' Funds and Paiko Case by Robert E. McGlone; 11 May, C-8, Ariyoshi: Paiko Plan Doubtful; 15 May, A-6, Paiko Home Upheld; 19 May, A-4, Mayor Wants Paiko Lot Condemned; 26 May, A-4, Judge Won't Stop Paiko Construction; 27 May, C-4, Judge Denies Injunction--Ruling Favors Paiko House by Helen Altomn; 5 June, A-3, No State Funds for Paiko by George K. Kakesako; 8 June, A-12, The Paiko Case; 10 June, B-8, Council OKs Report on Paiko Lot; 18 June, A-6, City Moves to Buy Inaba's Lot at Paiko.

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The Paiko Controversy--in Retrospect by Robert J. Shallenberger

I suppose it is safe to say that the controversy at Paiko Lagoon is not yet dead, but it certainly has reached a plateau. The implications of recent Land Board and court decisions will be far-reaching. It's only been a year since the Board of Land and Natural Resources approved granting of a utility line permit that ultimately paved the way for construction of a private house at Paiko Lagoon Wildlife Sanctuary. Yet, it's been nearly twenty years since the Hawaii Audubon Society (HAS) first cried out for improved protection and educational use of Paiko Lagoon. Margaret Titcomb's letters about Paiko, written in the early 60's, bear a striking resemblance to more recent testimony. Yet, the need for wetland sanctuaries and environmental education opportunity has increased dramatically since that time, when her pleas fell on deaf ears. It was some time before efforts of the HAS and others produced significant results, in the form of legislative appropriations for habitat improvements and land acquisition for sanctuary and nature park establishment.

The Board decision to permit utility lines, and indirectly house construction on Paiko peninsula was, in part, justified by Dr. Andrew Berger's testimony that such activities would have little, if any, impact on the birds at Paiko. Other ornithologists, including myself, disagreed. We feel that construction and occupation of the residence at the site will significantly reduce the chance that Stilt will nest at Paiko and will also reduce the educational value of the proposed nature park. Although available biological information about Hawaiian Stilt is regrettably limited, we feel that the existing information presented that is relevant to this question, supports this belief. When the issue was brought to court and returned to the Land Board, it was clear that the relatively uninformed decision makers were overwhelmed by the conflicting scientific testimony. Frankly, we were shocked when Dr. Berger chose to strengthen his scientific arguments through a libelous treatment of the opposing scientists. Our testimony was described as "emotional, biased or intellectually questionable," as well as "irrelevant" and "pseudo-scientific." We were accused of lacking "an objective, scholarly approach to ornithology" and described as "intellectually dishonest." What role this testimony played in the court and Land Board's decision to stand by their earlier permit authorization will never be known, but it's a shame that the issue was not decided on the facts alone.

So what will be the result of all of this controversy? The house is now complete and occupied. The only State wetland sanctuary on Oahu, and the only waterbird area readily accessible to the public, now has a house in the middle of it. More than one million dollars of public funds were spent to preserve a sanctuary for endangered waterbirds to feed and nest, and for the public to enjoy a truly unique resource. Yet, all of this has now been compromised for the one-sided benefit of a single family. Regrettably, it is also true that whatever the future holds for the Stilt at Paiko, it can be twisted conveniently to follow Dr. Berger's arguments. If Stilt do not choose to nest at Paiko, it may be interpreted to verify Dr. Berger's remark that Paiko is now a "sanctuary in name only." The role that the house may have played in preventing nesting will likely be ignored. If, on the other hand, Stilt do nest at Paiko, it will be said that we were wrong in our predictions. Frankly, I cannot think of a situation in which I would rather be wrong.

The result of this case in court is bound to cause problems in the future. Can we expect the Legislature to enthusiastically support wildlife conservation activities in the future after a case such as this? If you were a legislator, would you vote for project funding in the future when your own conservation agency (Division of Fish and Game) took such an on again-off again stand ~~stand~~ in its first waterbird sanctuary on Oahu? This case also leaves us with at least two dangerous precedents. The State Division of Fish and Game, after years of effort to secure and improve the Paiko Lagoon area, has, in effect, gone on

record with no opposition to the concept of a private residence in the middle of a wildlife sanctuary. Surely each case in the future will be settled on its own merits. But, in the absence of intensive waterbird research activities in coming years, we will be forced to rely on the same limited, but conflicting, data in the future. Doesn't it seem reasonable to expect that later decision-makers will refer back to this case as a source of direction? On a broader scale, the decision in this case has, in effect, placed the burden of proof of environmental impact, upon those who seek to preserve rather than upon those who propose change. Can it not truly be said that no individual wetland area, with the possible exception of Kanaha Pond, is absolutely critical to the future of any endangered waterbird species in Hawaii? If we accept this point, it does not take much imagination to predict the sequential degradation of the rest of our limited waterbird areas using the justification that the loss of any individual area will not lead to the extinction of any bird species. I'm sure this short-sighted argument played an influential role in the Paiko case. It's a shame that we can't all see the forest for the trees.

Field Notes from Alan D. Hart, 14 September 1976: Red-billed Leiothrix

Reported sightings of Red-billed Leiothrix (Leiothrix lutea) have apparently been rare on Oahu in recent years. Their population here has radically declined for unknown reasons. In light of this peculiar phenomenon I'd like to relate 2 observations I made of this species during May and July. In fact, they constitute the only Leiothrix I've seen in the last 4 years despite considerable time spent in and throughout Oahu's mountains. But I should further add that my ongoing field work with Hawaiian land mollusca generally precludes all but the most casual of bird observations during highland trips.

The first sighting occurred during the late morning of May 16, 1976, on a ridge trail in upper Kaluaa Gulch (central Waianae Range). I saw one Leiothrix at a distance of 25' or less without binoculars and heard it sing. The elevation was over 2300' and the forest was largely comprised of native vegetation.

The second observation took place upon the near completion of a 2 day field trip into the Ewa Forest Reserve (Koolau Range) on July 12, 1976. Hiking companion Dick Davis and I heard and saw one Leiothrix singing in a tree along the Waiawa Ditch trail late that afternoon. Again the bird was quite close and field glasses were not necessary. The elevation was approximately 850-900'.

In both cases I watched the bird only long enough to positively establish its identity.

THE SUNDAY STAR-BULLETIN & ADVERTISER, 15 August 1976, page A-11; Molokai Sand Dunes: A Flight into the Past by Bruce Benson: The Molokai sand dunes that five years ago yielded the fossil remains of an ancient, flightless goose have now produced about a dozen more new species of birds. Like the goose, the new species are the remains of extinct creatures whose existence on the Island had never been suspected. The sand dunes have become a treasure trove of a complete ancient evolutionary cycle of animals.

Dr. Storrs L. Olson, a curator of birds at the Smithsonian Institution in Washington, has just spent two weeks on Molokai as the guest of Mrs. Joan Aidem. It was she who discovered the bones of the ancient goose while beachcombing. Since then, a cache of 4,000 to 5,000 bones have gone from the dunes to the Smithsonian for analysis.

"Molokai gives us an Island avifauna (flying animal) record that is probably as good as any in the world," Olson said in an interview. "The whole faunal (animal) record of Molokai is virtually entirely different from what exists there today. What the fossil record is showing us is a whole faunal cycle. It's a big chunk of the record just where you would like to find it."

Olson declined to identify any of the additional species, which he said number "about a dozen," pending further laboratory study.

Besides the flightless goose found on Molokai in 1971, a flightless ibis was found in a lava tube on Maui in 1972. It, too, was sent to the Smithsonian. "The goose and ibis are pretty bizarre," Olson said. "A flightless ibis is just as strange as the dodo bird, and I doubt that anyone would have imagined that one ever existed."

Just how long ago the grounded ibis was strutting around Maui is still unknown. Scientific dating, however, on the remains of snails found with the Molokai goose fossil suggest that the latter existed about 25,000 years ago. Both goose and ibis evolved in Hawaii into creatures with heavy, squat limbs. Olson said the goose also had bony projections, not to be confused with teeth, on its jaws.

The evolutionary ancestors and descendants of the goose and ibis are unknown and may, in fact, never be learned, Olson said. Antecedents could have arrived from the U.S. Mainland, from Australia or Asia. But if their place in evolution remains unknown, they may nonetheless provide science with some insights on the process of evolution itself, Olson said. Although he is "only playing hunches" at this stage, he said that "the rate of evolutionary change when compared may be tremendously fast, faster than anyone had ever anticipated." What Olson would like to find most in Hawaii at this point is a vault in nature similar to the dunes of Molokai, but situated on another Island and holding the fossil remains of birds that existed at a different point in time. So during the final days of his stay in Hawaii, he has flown to Kauai, to take a first-hand look....

HONOLULU ADVERTISER, 21 August 1976, page A-5; Vital Bird Fossils Discovered on Kauai, by Jan TenBruggencate: A Smithsonian Institution curator of birds yesterday reported "spectacular" findings of bird fossils along Kauai's south coast. Dr. Storrs L. Olson said he found a bird fossil site in the Mahaulepu area, second in importance in Hawaii only to a site on Molokai. Olson, after a week of digging on Kauai, said he has found several apparently new species of birds and several new extinct species that may provide important data about the evolution of Hawaii's existing native birdlife. Olson said he and four assistants recovered about 3,000 bones that appear to belong to about 20 species of birds.

He said he surveyed "just about all the sandy areas on the island" before zeroing in on Mahaulepu. There were no fossil findings at Polihale or Barking Sands on Kauai's far west side, where he had expected to locate material, he said. The Mahaulepu site appears to be newer than some of the Molokai deposits and will be valuable for comparative studies of bird evolution in Hawaii, he said.

Olson said he found three species of geese. One appears to be similar and perhaps identical to the nene goose that is still found in the islands, but two species are a flightless variety never before found. There were the bones of an albatross now found breeding only in the Leeward Islands of the Hawaiian chain, he said.

While recovering the bones of the larger birds, the searchers located small bird bones and returned with screens to separate them from the sand. They found what appear to be extinct birds that may be ancestral forms of Hawaii's native honeycreepers, as well as the bones of some existing birds, he said. "They could provide a tremendous amount of information about the ancestors and origins of Hawaiian honeycreepers," Olson said. "I don't think anyone thought that we would find fossil information on the evolution of Hawaiian birds like we have," he said.

The team working on Kauai did not find evidence of the flightless birds that has been located on Molokai, but Olson did not rule out further findings at the south shore site.

"There's still much more there," he said.

HONOLULU STAR-BULLETIN, 7 October 1976, page A-19; New Wildlife Plan by Gladwin Hill:

An epochal change in the nation's approach to wildlife conservation is being proposed by leading environmentalists, with significant support from the federal government. Their idea, in essence, is that instead of concentrating federal expenditures on conservation of endangered species and on the very small number of creatures prized by hunters and fishermen, national efforts should be mounted on a far larger and broader scale.

The goal would be to establish and protect complete stable "ecosystems"--the varying complexes of myriad interdependent animals and plants, among which mankind is a relative, and disruptive, latecomer. Only in this way, it is contended, can mankind head off potential catastrophes--the result of thousands of years of exploiting and altering the Earth's natural resources and relationships. A major educational campaign along these lines is being initiated under federal auspices, and some prospective legislation is being drafted. The thesis of "wholeistic" or all-inclusive national conservation policy, under academic discussion among ecologists for some time, received its most expansive airing to date in the recent three-day conference on wildlife.

Significantly, the conference was convoked by the Council on Environmental Quality, the federal agency that advises the President and Congress on environmental policy. It was the first such attention given the subject by the agency in its seven-year history. ...

Some of the trends viewed with concern are the following: 1. The rapid acceleration in the extinction of species, from a time frame of thousands or even millions of years to a relatively few years. This artificially reduces the genetic bank from which animals and plants can draw to mutate and adapt to new conditions. 2. The fact that the extinction of species largely reflects reckless destruction of their habitats, such as forests and other vegetation, on which mankind is dependent for, among other things, much of his vital oxygen supply. 3. The tendency, in fragmentary, selective conservation to create "monocultures" on a single dominant species of animals and plants, destroying natural webs of supportive interrelationships and leaving the individual species especially susceptible to adverse developments.

"In speaking of wilderness and wildlife," Dr. Russell W. Peterson, the retiring chairman of the Council, said in the keynote address, "we are...speaking of an entire system of relations, beginning with bacteria in the ground and extending to the loftiest Douglas fir. Many of these systematic interrelationships affect man. We don't know enough about most ecosystems to predict the effects of disrupting them."

Russell E. Train, administrator of the Environmental Protection Agency, summarized the thrust of the conference: "We have been governed by a definition of wildlife that is far too restrictive. State and federal officials can no longer be content with only satisfying the traditional constituency of hunters and sportsmen. We must move as rapidly as we can at both state and federal levels to re-direct and re-design our wildlife activities so that they reflect a definition that embraces all living animal life." ...

15 October 1976, page A-15; Whooping Crane Kills Itself: The largest, most robust of the five whooping cranes hatched this spring by foster parents died Sunday after flying into

a wire fence, the Fish and Wildlife Service reported today. Whooping cranes are notorious for running into such obstacles, the announcement noted. The dead bird was one of only 58 wild whoopers known in existence.

Editorial Policies: At the special board meeting, 3 October 1976, the following were adopted: 1. To avoid confusion, all bird names will be treated as proper nouns and will be capitalized--Melodious Laughing-thrush not melodious laughing-thrush. 2. To conform to AOU Check-list, possessive form in the vernacular names of birds will be used--Bulwer's Petrel not Bulwer petrel. 3. The letter s is not a part of the Hawaiian alphabet. It is not used as a plural marker in Hawaiian. The plural form is distinguished in other ways. (*) 4. 'U'ina, the hamzah, is a guttural break in pronunciation between two vowels...and it is represented by an inverted comma. ...This guttural is properly a consonant, and forms an essential part of the words in which it is found. Its presence or absence in Hawaiian words marks distinct terms /'Ou = Bulwer's Petrel, 'O'u = Honeycreeper/. ...For clarity... the 'u'ina should be indicated when writing. (*INTRODUCTION TO THE HAWAIIAN LANGUAGE by Judd, Pukui, and Stokes). For proper spelling of Hawaiian bird names both macron and 'u'ina will be used. (see 'ELEPAIO, Vol. 36, No. 10, April 1976, pp. 117-126)

ALOHA to new members:

Mrs. Miriam Chung, 3324 Wiliama Place, Honolulu, HI 96816
 Jean Fitzgerald, 2130 Mauna Place, Honolulu, HI 96822
 Jackie Gardner, 317 Lakeside South, Seattle, Washington 08144
 Elizabeth Gustafson, 1808 Drexel Drive, Davis, California 95616
 Kalman Gyula, H-9500 Csorna, Voros Hadsereg ut 53 11/2, Hungary
 Dr. Gerrit R. Ludwig, 120 Pauahi St, Suite 305, Hilo, Hawaii 96720
 Kim Normoyle, 1718 Idylwood Court, Modesto, California 95350
 Melissa Otaguro, P.O. Box 1072, Kealahou, Kona, Hawaii 96750
 Carmelitta Petalver, 1439 Pensacola St, Apt A, Honolulu, HI 96822 (Reinstated)
 Dr. & Mrs. Paul W. Schaefer, Asian Parasite Lab, c/o Am Embassy (Sapporo), APO SF 96503 /
 Library, Hawaii Preparatory Academy, Kamuela, Hawaii 96743 (Reinstated)
 " , Kohala High School, P.O. Box 278, Kohala, Hawaii 96755
 " , Leupahoe High School, P.O. Box A, Leupahoe, Hawaii 96764
 " , Pahoa High School, P.O. Box 3, Pahoa, Hawaii 96778
 " , St. Joseph's High School, 1000 Ululani St, Hilo, Hawaii 96720
 " , Waiakea High School, 200 W. Puainako St, Hilo, Hawaii 96720

Donations: Miss Grenville Hatch, a charter honorary-life member who has guided the Hawaii Audubon Society for many years, has generously contributed \$50.00 with the following note, "It is high time I helped to support the Society. And I do feel a great sense of gratitude for all it has done in the past, and what it is trying to do today." She also binds and donates her 'ELEPAIO to the Society. MAHALO NUI LOA for your keen interest and generous guided KOKUA. We are also grateful to Kim Normoyle, a new member, who has generously donated \$2.00 with a note, "...to help with costs;" and to the following non-members who donated their changes from the purchase of HAWAII'S BIRDS: Mrs. Dorothy Carter 75¢, Mrs. Ross Dana 75¢, George S. Gotto \$1.75, Mrs. Robert L. Gray 75¢, Mrs. Dean Hobbs 75¢, Virginia Iris 75¢, Mrs. Marvin A. Kaminska \$4.75, and Mrs. R.M. Richards 75¢. MAHALO NUI LOA!

Please report all bird sightings to field observation recorder, Dr. Robert L. Pyle, 741 N. Kalaheo Ave., Kailua, Oahu 96734, telephone 262-4046.

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When you find a bird's nest, please call Dr. Andrew J. Berger at the Department of Zoology, University of Hawaii, telephone 948-8655 or 948-8617.

HAWAII'S BIRDS, a field guide, is now available. Price per copy: \$3.00 + postage & tax Postage: U.S. 21¢ book rate, 57¢ first class; foreign--variable, weight 5ozs; sales and mailing in Hawaii--add 12¢ sales tax. Send in orders to Book Order Committee, Hawaii Audubon Society, PO Box 22832, Honolulu, Hawaii 96822.

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NOVEMBER ACTIVITIES:

- 8 November - Board meeting at Waikiki Aquarium Auditorium, 7:00 p.m. Members welcome.
- 14 November - Field trip to study waterbirds. Meet at the State Library on Punchbowl Street at 7:00 a.m. Bring lunch, water and if possible your car. Transportation cost (\$1.00) to be paid to the drivers. For information call evenings: Mike Ord 947-3145 or Dr. Robert Pyle 262-4046.
- 15 November - General meeting at Waikiki Aquarium Auditorium at 7:30 p.m. Program: Beasties from the Deep--A Look at Midwater Life in Hawaiian Waters by Dr. John F. Walters, Department of Oceanography, University of Hawaii. (color slides)

HAWAII AUDUBON SOCIETY EXECUTIVE BOARD:

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