

THE WEST INDIAN WHISTLING-DUCK AND WETLANDS CONSERVATION PROJECT — WORKING GROUP REPORT ON A TRAINING WORKSHOP HELD IN NASSAU, BAHAMAS, 13–15 NOVEMBER, 1997

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AS PART OF THE NEWLY INITIATED West Indian Whistling-Duck (WIWD) and Wetlands Conservation Project sponsored by the WIWD Working Group of the Society of Caribbean Ornithology, a workshop entitled "The West Indian Whistling-Duck and Wetlands Education Training Workshop" was recently held in Nassau, Bahamas, 13-15 November 1997. The workshop was held at The Retreat, headquarters of The Bahamas National Trust. Here we present an official report on the proceedings of the workshop, along with plans for the way forward.

The Workshop, part of the WIWD Working Group's activities, was made possible as a result of funding obtained by the Co-chairs of the Working Group (WG) and the Bahamas National Trust. Financial support for this project comes from the U. S. Fish and Wildlife Service Western Hemisphere Program, the American Bird Conservancy, and Conservation International Bahamas. The workshop was organized by the WIWD WG Co-chairs, Dr. Lisa Sorenson and Patricia Bradley. Lynn Gape of The Bahamas National Trust led the local organizing committee.

The WIWD WG, formed at the 1996 annual meeting of the Society of Caribbean Ornithology in Nassau, Bahamas, has been developing a conservation plan to reverse the decline of the threatened WIWD in the West Indies. Towards this end, the group has initiated a region-wide public education and awareness program on the WIWD and the importance of wetlands in general. Specific objectives of this program include making people aware of the value of WIWDs and their wetland habitats, creating local pride in the WIWD as a Caribbean endemic, and raising interest in the potential of WIWDs (and other wetland species) for eco-tourism.

The objectives of the WIWD and Wetlands Education Training Workshop in Nassau were to 1) promote awareness of the WIWD and wetlands, 2) review educational tools and methodologies for the promotion of the WIWD and the importance of wetlands, and 3) provide training to regional biologists in population survey and monitoring techniques.

A total of 45 people attended the workshop. This included 1 to 2 representatives from the following countries: Antigua and Barbuda, The Bahamas, Cayman Islands, Jamaica, Turks and Caicos Islands, Dominican Republic, Cuba, Puerto Rico, the United States, and Canada. Also in attendance were 11 schoolteachers from 4 different Bahama Islands, Bahamas Ministry of Agriculture and Fisheries personnel (conservation officers and game wardens), Bahamas Ministry of Education personnel, and members and officers of the Bahamas National Trust (BNT). Following opening remarks by Lynn Gape, Public Relations and Education Officer of the BNT, and by the WIWD WG Co-chairs, the workshop began in

earnest.

WEST INDIAN WHISTLING-DUCK SLIDE PRESENTATION FOR THE GENERAL PUBLIC

Dr. Lisa Sorenson presented a 45 minute slide show that she developed for the general public. The show begins by describing the WIWD's natural history including identification, range, breeding biology and behavior, and habitat use; followed by the WIWD's conservation status and threats to its continued survival, including poaching and unregulated hunting, wetland destruction, wetland degradation, and depredation by introduced mammals. The final part of the presentation addresses conservation efforts: what the WG is doing to help reverse the decline of the whistling-duck and save it from extinction. The show describes the WG's Public Education and Awareness Program, the WIWD poster that will be distributed throughout the West Indies, and emphasizes to the audience the importance of wetlands; that wetlands need to be protected not just as habitat for the WIWD, but also for the health and welfare of local human populations. The many services that wetlands provide including food control, sources of fresh, unpolluted water, nurseries for marine fisheries, and as habitat for other species are described and illustrated with many beautiful photos (our thanks to those who donated slides). The presentation ends with the speaker informing the audience of what they can do to help, including suggestions such as not polluting, supporting conservation of wildlife and wetlands, reporting illegal hunting, and going birding and enjoying our natural heritage.

Dr. Sorenson commented that the script she prepared was intended to serve as a guide; it is general enough so that it could probably be shown on any island in the West Indies, but she urges that presenters on each island also include local information and issues related to the WIWD and its habitat, where appropriate, because this will make the presentation more meaningful to the local audience. Following the workshop, copies of the slide show and script were distributed to each island representative. A Spanish version of the slide show is currently in preparation and soon will be available for distribution.

SECONDARY-AGE SCHOOLCHILDREN EDUCATION PROGRAM

Ms. Mars van Liefde (Cayman Islands) made a presentation on the WIWD education method she used successfully with older schoolchildren in the Cayman Islands. She emphasized the importance of reaching this age group with a conservation message, because this is when many youngsters

become interested in hunting. Ms. van Liefde stressed the importance of student interaction during the presentation. She designed her presentation to encourage the students to determine answers for themselves as opposed to simply presenting them with facts and figures. Using a blackboard and overhead projector, Ms. van Liefde presented the following concepts and information on the WIWD: names (common and scientific), identifying characteristics, habitat, ecological importance, threats faced by the species and, importantly, what students can do to help raise awareness and save the WIWD from extinction. Ms. van Liefde said that she was always careful to not bombard the students with too many large words and complex concepts, but rather explained her ideas as she went along, letting the students figure out words and concepts themselves wherever possible. Ms. van Liefde mentioned that she was also conscious of the length of the presentation, being careful not to bore her audience. She reported that the students were delighted when informed that they would not be tested on the material and that no-one ever fell asleep during her presentation! Ms. van Liefde's excellent ideas will be incorporated into our WIWD and wetlands education workbook (in progress).

PRIMARY-AGE SCHOOLCHILDREN EDUCATION PROGRAM

This well-received presentation comprised two education techniques:

Puppet Show.—Ms. Lynn Gape and Ms. Monique Clarke (Bahamas National Trust) presented a puppet show written by Ms. Gape on the WIWD and wetlands conservation suitable for young children. Assisted by Ms. Karen St. Cyr from the Ministry of Education (Bahamas) the puppet show was presented in its first draft. In scene I, the protagonists, children "Whitney" and "Will," are receiving a talk from "Environmental Eddie," who has taken them on a tour of the Adelaide Creek Wetland. Eddie explains why wetlands are important as nurseries for groupers and crawfish, habitat for ducks, among other wildlife. The audience is introduced to other charming characters, including "Whistler" the WIWD, "Pinny" the Bahama Pintail, and "Blue" the Little Blue Heron, who are listening in the background. In Scene II, Whitney and Will return to Adelaide to look at the ducks and other wildlife. They see a bulldozer and then overhear "Developer Dan" talking about how he is going to fill the wetland and make it into homes for people. Whitney and Will meet Whistler, Pinny, Blue, and other mangrove animals who are upset about losing their homes. Whitney and Will suggest they go to Environmental Eddie for help. In Scene III, all the animals, Whitney and Will tell Environmental Eddie about the proposed development and ask for his help. After they leave, Environmental Eddie shakes his head and says that it is now time for the "Environmental Ninja." In the final scene, the animals and children led by the Environmental Ninja (Eddie now wearing a cape and bandanna) meet with Developer Dan and convince him that mangrove wetlands are good, and that it will enhance his development to have a natural area for bird watching, and other environmentally friendly activi-

ties as part of his development — a happy ending for all. Participation by children in the audience was written into the script: every time the audience hears "Mangroves are useless," they respond with a chant (written on poster board):

No, they are not!

Mangroves are nurseries for crawfish and conch,

They give us protection from storms that knock,

Homes for birds and ducks that fly,

Places of beauty to soothe our eyes.

The puppet show was extremely well-received and drew much laughter and applause. All agreed that it was fun, engaging, and with a clear wetlands conservation message for schoolchildren and grown-ups alike. With a few minor adjustments, it was thought that the puppet show could easily be duplicated and shown on any of the participating islands. The puppet show script, theater design, and photos and templates of the puppets will be made available to each island.

Coloring Book.—Ms. Melissa Maura, a talented artist and supporter of The Bahamas National Trust, kindly volunteered to prepare drawings for a WIWD coloring book. Lynn Gape presented the frames, all beautifully done, that had been created by Ms. Maura. The various drawings depict the WIWD in the following scenes: upright stance, feeding, in flight, fighting, with range map, in mangrove habitat with signs indicating threats to the duck, other species that share WIWD habitat, adult at nest with eggs, pair swimming with ducklings, and children bird-watching at a wetland. The idea of the coloring book was well received and will be actively followed up by the Working Group. The drawings, along with descriptive illustrations, will be published in a coloring book and also as separate pages that can be photo-duplicated and distributed to schoolchildren.

HUNTER EDUCATION TECHNIQUES

Mr. Pericles Maillis (past President BNT, conservationist, hunter) presented the Bahamian experience in dealing with hunters. Mr. Maillis informed participants that the BNT has for many years been active in working with hunting issues in the Bahamas. Mr. Maillis highlighted some of the problems and successes that have occurred in managing hunting in the Bahamas in the past by describing the management history of White-crowned Pigeons, a major game bird in the Bahamas. Some of the lessons learned from this experience could be applied to the current problems throughout the West Indies of unregulated hunting and poaching of WIWDs. Mr. Maillis concluded that the success of the White-crowned Pigeon conservation program was the result of a well-developed public slide program and hunter education meetings presented by a hunter (Mr. Maillis). This enabled the presenter to use the same frame of reference as the audience and quickly win their confidence. Mr. Maillis therefore advocates that a conservation-minded hunter be involved in a WIWD Hunter Education Program in each island and, if possible, should be responsible for making presentations to hunter groups. It is important to make hunters feel like they

are part of the solution, not the problem.

Mr. Maillis felt that hunter education was important in our conservation efforts of the WIWD. He believes that WIWDs are presently shot because many people are not aware that they are endangered or that it is illegal to shoot them. Another major problem both in the Bahamas and other parts of the Caribbean is species identification: WIWDs are frequently reported shot by mistake or by hunters who did not know what they were shooting. Mr. Maillis believes that hunter attitudes and behavior would change with education and that once hunters are educated, we can depend on their knowledge to increase protection of the duck, as policing can often be difficult (especially in the Bahamas).

As part of our Hunter Education Program, the WIWD WG is currently preparing a slide show on the WIWD specifically for hunter groups. This show will emphasize duck species identification, a review of local hunting laws and which ducks are legal game, and ways in which hunters can aid in conservation efforts. A plasticized identification card showing both resident and migratory ducks of the West Indies (standing and in flight) that hunters can take into the field is currently in production; a mock-up was circulated at the workshop and comments were made on the lay-out. The WIWD poster will be placed in areas frequented by hunters. Also discussed was the initiation of a duck hunting stamp (modeled after a program developed and administered by Wildlife Habitat Canada) which would generate funds for conservation, and offering alternatives such as clay pigeon shooting to hunters in the off-season.

SURVEYING AND MONITORING OF WIWD POPULATIONS

Ms. Diane Eggeman (Florida Game and Freshwater Fish Commission) covered basic aspects of waterfowl census methodology that will be useful in monitoring WIWDs. Her presentation included the various goals of monitoring (e.g., documenting population status and change, evaluating effects of hunting or other factors that influence populations), primary versus secondary population parameters, how monitoring is used in waterfowl management, the basics of sampling, statistical analysis, and development of a monitoring program. Ms. Eggeman told participants that they should be conscious of the following points when thinking about monitoring: always begin with a clearly defined goal, identify parameters for monitoring, identify methods of monitoring, remember to include variance estimates, and conduct a preliminary study to assess feasibility and precision.

Following Ms. Eggeman's presentation, the group discussed the potential goals of a WIWD Survey and Monitoring Program and several different objectives were identified, including: obtaining a range-wide estimate of population size, determining island population size, determining habitat use, identifying important breeding sites, monitoring trends, monitoring local hot spots, and determining presence and occurrence. It was pointed out that we really need to know baseline population numbers; i.e., what is the present range-wide WIWD population size? Given the special problems

posed by WIWDs — the inaccessibility of much of their habitat, their nocturnal nature, and the present lack of resources to adequately sample their entire range — participants agreed that a range-wide estimate of population size was not currently feasible. Determining habitat use and identifying key breeding habitats were considered two monitoring goals badly needed for WIWD habitat protection efforts. It was decided that the WG would support survey and monitoring efforts on several islands (Jamaica, Antigua and Barbuda, Eleuthera, and Cuba) and pilot studies will be conducted on these islands in the coming months. Determining simple occurrence of WIWDs using playback tapes will also be explored. Ms. Eggeman concluded her session by emphasizing two important take-home messages: 1) clearly define the goals and objectives of your monitoring, and 2) be aware that you will only find WIWDs where you look (i.e., don't sample only in certain habitats).

WETLANDS EDUCATION

Given an entire day to dazzle participants with her experience, insights, and knowledge, Michelle Kading (Head Interpreter, Oak Hammock Marsh Interpretive Centre, Manitoba, Canada) came through with flying colors. Ms. Kading began her program by showing a short video and giving a slide presentation on the history and education activities at Oak Hammock Marsh Interpretive Centre, a successful wetland restoration project.

Ms. Kading then discussed interpretive techniques (what makes a good interpreter), general communication skills, and how people learn best (by *doing*, not just by hearing or seeing), followed by an exercise in how people perceive wetlands (Wetland Alphabet). This introduction set the stage for the rest of the day's activities, which included mostly hands-on demonstrations and activities. Ms. Kading demonstrated "Critter Dipping" — a means of introducing folks to the insects that live in wetlands. Bugs can be examined up close using either "low-tech" clear, plastic bug boxes (milk carton bottoms work too!) and magnifying glasses or "high-tech" video cameras hooked up to a television set. Children discover what critters they are looking at by drawing them and matching them up with bugs on a "Marsh Monster" sheet. If it is not possible for schoolchildren to visit a wetland firsthand, Ms. Kading demonstrated the next-best substitute: the "Port-a-Pond" — a sheet of thick plastic, which when placed on the floor with edges rolled up and a bucket of pond water poured in — works beautifully in a classroom situation. Before breaking for their own lunch, participants discovered what owls eat for lunch by dissecting their own owl pellets and matching up the various tiny bones found with those drawn on an identification sheet.

In the afternoon, participants divided up into six groups, each selecting two activities or games to demonstrate to the rest of the Workshop. Participants were given a framework and some materials which they used to develop an education exercise that as then acted out for the other participants. These activities, although a lot of fun, all have an underlying

educational objective and are designed to teach students about some aspect of wetlands. The presentations were in the areas of general wetland ecology, wetland species and adaptations, food chains, water hydrology, and wetland issues. Judging from the creative ideas, high level of enthusiasm, and laughter heard throughout the afternoon, it was clear that the exercises were well-received and enjoyed by all. Ms. Kading ended the day's exciting program with an inspirational "Bird in the Hand" story that left many participants dabbing their eyes.

Feedback received from the participants (from evaluation forms completed at the end of the Workshop) indicated that all were inspired by Ms. Kading's presentation as well as the other sessions, and that all returned home with a renewed sense of purpose, confidence, and enthusiasm, and with many new tools and ideas for carrying out WIWD and wetlands education in their own country. Overall, the organizers felt that the Workshop was hugely successful and we thank all those that were involved in the organization and that gave presentations for their assistance and hard work. We are more convinced than ever that we have a great group of people involved in our conservation effort - all enthusiastic, talented, motivated, and dedicated people with excellent ideas and an ability to work well together.

PLANS FORWARD

The Workshop concluded with four main tasks to be undertaken:

1. *WIWD and Wetlands Education and Awareness Program.*—The presentations that have been developed (or are in preparation) for the different target groups and which were presented at the Workshop are now expected to be used in the respective islands to begin educating people about the WIWD and the importance of wetlands. Island representatives that received binoculars (40 pairs were distributed) are expected

to take schoolchildren and the general public on field trips to see the WIWD and other wetlands avifauna. Working with Ms. Gape and Ms. Kading, the WG plans to develop and publish a Wetlands Education Workbook (using the excellent ideas, tools and activities demonstrated by Ms. Kading) for use by schoolteachers and other natural resource educators in the Caribbean. The WIWD coloring book will also be published and distributed.

2. *Monitoring.*—Jamaica, Eleuthera, Antigua and Barbuda, and Cuba were mandated to begin some form of monitoring activities with a report expected for next year's SCO meeting in Guadeloupe. It was felt by the participants from these islands that sufficient logistics are in place to undertake this activity. Both of these activities will be monitored by the Co-chairs and reports will be given at the 1998 SCO meeting in Guadeloupe.

3. *Hunter Education Workshop.*—As requested by SCO members in Guadeloupe, the WG plans to hold a Hunter Education Workshop at the 1998 SCO meeting in Guadeloupe. Plans are currently underway.

4. *"Watchable Wildlife Ponds."*—The WG would like to encourage and support the development in the Caribbean of "Watchable Wildlife Ponds," accessible wetlands where the public can observe WIWDs and other wildlife. This may entail building a boardwalk, nature trail and observation blind, installing interpretive signs that provide information on birds and other wetland species, and perhaps (at least initially) releasing captive-reared birds into the area to attract wild birds. Such a pond would serve as an attraction to both the local human population and eco-tourists, thereby enhancing an appreciation of wildlife for both its aesthetic and economic value. To help us get started, the WG plans to invite a representative from the Pointe-A-Pierre Wildfowl Trust in Trinidad to share their experience and expertise in creating wildlife ponds with WG members at the Guadeloupe SCO meeting.

REQUEST FOR ASSISTANCE

If anyone has a copy of G. H. Voous' English-language version of "Birds of the Netherlands Antilles" and would like to sell it, please contact:

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