## HUNTING WORKSHOP - SOCIETY OF CARIBBEAN ORNITHOLOGY

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A full-day workshop on hunting in the Caribbean was conducted at the SCO meeting in Guadeloupe on 28 August 1998. The workshop objectives were to identify: (1) the most important elements which must be undertaken to establish an effective hunting program; (2) mechanisms for achieving these elements; and (3) initiatives which have successfully implemented one or more elements of a successful hunting program.

The process used to address these objectives was the following:

- (1) In a single brainstorming session, all participants contributed to developing a comprehensive master list of needs believed important for establishing and managing an effective hunting program. These items were sorted by category (monitoring, laws and regulations, etc.).
- (2) We broke up into 4 working groups wherein participants prioritized each of the items on the master list as being of either high, medium, or low importance.
- (3) The priorities developed by the 4 working groups were reported to a session of the entire workshop and then used to reduce the master list to only those items identified as being of high priority by two or more working groups.
- (4) New working groups were then formed based upon theme. The first group addressed research and monitoring; the second, laws, regulations, permits, and law enforcement; and the third, public outreach and hunter education. Each group was asked to refine or clarify broadly stated priorities, identify needs and mechanisms necessary to successfully implement each priority item and any existing examples of successful implementation.
- (5) Each of the three thematic working groups reported the results of their discussions to the entire body.

The highest priority actions identified by workshop participants as essential to any hunting program are listed in Attachment 1. Perhaps the most important value of creating this list was to demonstrate the breadth of the hunting issue. As priorities were listed, it became evident that conducting a hunting program involves more than just setting a bag limit and season for the species to be hunted and then trying to enforce the law. Many other fundamental issues must be addressed if there is to be any hope of a hunting program being successful. Among these items are development of an effective and comprehensive hunter education campaign so that hunters are not only informed, but are actively involved in conservation of game species and their habitats. Also identified as important was the need to conduct public outreach so as to establish general public acceptance of any hunting program to be put in place. The need to monitor and evaluate all elements of the program, establish processes for permits, fees, and testing, create appropriate infrastructure and funding for the program – these and many other items were determined to be essential elements of a sustainable hunting program.

Another value of the priorities list is to serve as a checklist for any entities faced with the issue of establishing hunting programs. This would include several Caribbean islands which are presently grappling with this possibility.

The second phase of the workshop - addressed by the thematic working groups - focused on the second and third objectives: identifying mechanisms to achieve the priority actions and listing successful The three working groups each apinitiatives proached these objectives differently. The group on research and monitoring clarified some of the key criteria and other issues of importance to decisionmaking concerning a hunting program. A summary of this group's conclusions is presented in Attachment 2. The working group on laws, regulations, licensing, and law enforcement chose to develop a table presenting hunting data by island (Attachment 3). A summary of the discussions of the working group on public outreach and hunter education was not prepared.

Overall, the workshop was successful at demonstrating both the breadth and the complexity of establishing a hunting program. It highlighted various priority actions necessary for establishing such a program which many of us might off-handedly presume to be unimportant. Among these were the need to develop public acceptance of the program, establishing an environmental education program for children so that they understand how hunting might fit into their society, and even the need to promote an environmental ethic within the community – a necessity if people are not to abuse hunting laws and regulations.

The workshop provided the opportunity to exchange ideas and focus our thinking but, as with many issues, it provided no easy answers. Nevertheless, some Caribbean islands have clearly been more successful than others at implementing specific priority actions. Consequently, there were lessons to be learned from the interchange. Finally, the workshop represented the most intensive effort to date yet mounted in the Caribbean to facilitate interchange among islands on what to many of us is a difficult and thorny issue. Hopefully, this workshop will be only the beginning of an on-going dialogue that assists each island to more successfully address this issue.

## ATTACHMENT 1 PRIORITY ACTIONS FOR AN EFFECTIVE HUNTING PROGRAM

LAWS AND REGULATIONS Inform hunters of impacts Determine the existence of adequate legislative Study socio/economics of hunters authorities Authority over who can hunt LAW ENFORCEMENT Authority over what is hunted Train Agents (Laws, Regulations, identification) Authority to establish bans Patrols Authority over when hunting takes place Postings Authority over where hunting can occur **Recovery of Fines and Penalties** Authority over hunting methods Follow up of Prosecutions and Citations Authority over penalties Adequate authority and staffing Authority to regulate firearms, permits, and li-**EVALUATION** censes Authority to regulate resident vs. foreign hunters Effectiveness of all programs (hunter education, Have a process for preparing regulations outreach, research, etc.) Assure compliance with treaties and conventions Establish mechanisms for public input COSTS, ORGANIZATION AND INFRASTRUCTURE Coordination PERMITS AND LICENSING Data management and interpretation Procedures Tap existing efforts and resources (including Inter-Infrastructure national) **Firearms Permit** Focal point (single contact for information) **Firearm Skills Testing** Funding Exchange of information and experiences Fees Training HUNTER EDUCATION AND INVOLVEMENT Species identification manual RESEARCH Rules and regulations information sheet Species abundance Comprehensive liens exam (bird identification, Species distribution habitat cons, exotics) Breeding season Population demographics (survivorship, mortality) Outreach mechanism Involve hunters (data collection, habitat manage-Impact on other species Sensitive areas ment)

## Hunting Workshop

Trend analysis Local movements Migration Assure continuity of research Sustainable harvest/carrying capacity Criteria to determine which species to hunt

MONITORING

Pre-hunting species survey Hunt monitoring Post-hunt species survey Level of illegal hunting Hunter success

HABITAT Species/habitat conservation and improvement

PUBLIC OUTREACH Public acceptance Conservation ethic Environmental education targeting kids; re: wise resource use

## ATTACHMENT 2

RESEARCH AND MONITORING SUBGROUP REPORT HUNTING WORKSHOP (25 July 1998) Held at Eleventh Annual Meeting of the SCO Guadeloupe, French West Indies

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To set research and monitoring priorities, the group returned to the basic assumption underlying sustainable harvest of game animals. We assumed that sustainable harvest meant that populations could be harvested without long-term damage to the target population. Given this assumption, we proceeded to identify the minimal biological and hunter information necessary for a sustainable harvest of game animals. Below, listed in order of priority, are some of the most important items which must be determined before a species may be hunted:

- 1. The first stage is to establish a list of legally hunted game animals for a country. It was recommended that this list be re-evaluated regularly (i.e., yearly?) to determine if conditions related to listing have changed. The following must be determined before a species is included on a hunting list:
- The species must *not* be a single island endemic.
- The species must *not* be listed as globally threatened.
- The species must *not* resemble a threatened species in appearance.

- Will hunting detract from existing values of the intended species? (e.g., a "tame" species may have considerable ecotourism value, which would be lost if hunted).
- 2. Distribution and abundance (animals and hunters):
- Is the game species widespread throughout the island? (Widespread species may be more safely hunted than those with limited geographic or habitat distribution).
- Is the game species abundant? (Even measures of relative abundance, obtained by presence absence at a site may be helpful, although actual measures of density or total population are ideal).
- How many people will hunt this species? (Important to estimate potential hunting pressure on the population).
- 3. When is the peak of breeding? (Hunting season should be set so as not to overlap with the peak of breeding).

The group ran out of time before the following items were discussed and added to the three major

points listed above. However, these items were listed in sequence by one of the participants, and it is logical to assume that they would have been added to the three major points above.

- Basic population biology yearly reproductive output, yearly survival rate for adults versus juveniles, age at first reproduction, sex ratios.
- Determine if sustainable harvest is theoretically possible use the basic population biology data in standard population computer models and see if harvest is sustainable under different levels of mortality resulting from hunting.
- Determine best monitoring methods if a population theoretically can withstand some level of harvest, then methods must be developed to monitor the game species' populations (included both wild and hunter harvested samples).

Assessment of knowledge available for game species management on different islands – of the islands represented in the subgroup discussions, the Bahamas, Cuba, Martinique, and Puerto Rico appeared to have the best available knowledge for sustainable wildlife harvest, but even these islands lacked basic information needed to assure sustainable harvests.