**Secretariat for Conservation Biology**

# Natural Resource Monitoring Working Group

www.hear.org/hinrmwg

---

**Members:**
Randy Bartlett (Maui Land & Pine), Gene Conrad, Coleen Cory (TNCH), Nancy Glover (SCB), Scott Johnson (USFWS), Gary Ray, Alenka Remec (TNCH), Peter Schuyler (DoFAW), and Philip Thomas (HEAR/UH-CPSU)

**Purpose:**
Provide overall coordination for monitoring needs in the state.

**Background:**
At the 1995 Conservation Forum, sponsored by the Secretariat for Conservation Biology, the Natural Resource Monitoring Working Group was formed to work towards bringing consistency and standardization, whenever possible and appropriate, to the many monitoring methods and techniques currently being used by various land managers. As one of its first tasks, the group sent out a survey in August 1995 to 54 managers, biologists and researchers in Hawaii asking questions about the importance of monitoring in a management context and the need for monitoring tools. Forty-four responses were received, revealing that monitoring is considered important to guide management but is only partly giving the results needed; many new monitoring tools are considered necessary; and that we should collectively develop better approaches. The group meets bimonthly to accomplish the following activities.

**Activities:**

## 1. Establish a clearinghouse of monitoring information.

A monitoring information clearinghouse on the Internet will comprise both reference materials and documentation of existing monitoring programs.

## 2. Establish an expert advisory team to assist others with monitoring programs.

An expert advisory team will include members knowledgeable about monitoring design and analysis; remote sensing; GPS/GIS; data management; and members knowledgeable about monitoring specific ecosystem components such as feral ungulates, alien plants, alien predators, alien invertebrates, native invertebrates, vegetation/natural communities, native vertebrates, fresh water streams, and rare/endangered plants.

## 3. Conduct workshops on monitoring issues to develop statewide monitoring guidelines.

Monitoring programs for specific sites will differ, but there must be a set of monitoring protocols and/or outcomes that are common across all sites for regional and statewide decision-making.

Each workshop will be planned around a single topic to provide focus and the opportunity to explore issues in depth. Workshop agendas will address: 1) what monitoring methods are working by taking a step-by-step approach with specific examples, 2) identification of needs currently not being met and 3) changes/additions needed to improve current methods. The step-by-step approach should include discussion of monitoring objectives, design, data collection, data management, statistical analyses, data interpretation and management actions.

The workshop topics previously identified by natural resource managers are 1) feral ungulates, 2) alien plants, 3) alien predators, 4) alien invertebrates, 5) native invertebrates, 6) vegetation/natural communities, 7) native vertebrates, 8) fresh water streams, 9) rare/endangered plants, 10) remote sensing, 11) GPS, 12) GIS, 13) data management and 14) monitoring designs and data analyses.

## 4. Track monitoring needs, resulting from changes to the State Endangered Species Act.

- The State of Hawaii is considering changes to the State Endangered Species Act, that will include “Safe Harbors” Agreements, Habitat Conservation Plans, Recovery Planning and Implementation, “Incidental Take” Activities, and provisions for Biological Surveys on private lands. All of these activities will require a monitoring component.