

## Partners in Amphibian and Reptile Conservation (PARC) Position Statement on the Sustainable Use of Reptiles and Amphibians

[Note: This document was adapted from the position paper on sustainability of fish and wildlife resources, adopted at the July 2000 business meeting of the Western Association of Fish and Wildlife Agencies. It was developed following a discussion by the **PARC** Committee on Policy, Regulation, and Trade, and incorporates comments from several state wildlife management agencies and **PARC** members.]

### INTRODUCTION

Sustainability is, at its core, a simple but contentious concept. An action is sustainable if it can be continued indefinitely. Wildlife resource use that is not sustainable will lead to depletion of populations, degradation of habitats or ecosystems, loss of ecosystem services, and potentially extinction. Currently, some use of reptile and amphibian resources is sustainable, however some is not.

Urban development, poor land use practices, local collection (e.g. pets, food, research, cultural events, and trade), and indiscriminate killing based on prejudice, all negatively impact reptile and amphibian populations worldwide. Despite strong efforts by the conservation community, exploitation of some reptile and amphibian populations continues at high and probably unsustainable levels. In an ideal world, the use of reptiles and amphibians would be balanced by natural recruitment in adequate natural habitats, and would have no detrimental effect. The issue of use cannot be separated from issues of habitat protection, the economy, market forces, research, regulations, and law enforcement capability. Policies regarding reptile and amphibian use must consider all these issues, and be based on sound science to ensure that wild populations are not negatively impacted. A large body of existing knowledge on sustainable wildlife management can be applied to the sustainable resource management of reptile and amphibian populations. Policies and regulatory action directed at sustainable exploitation of reptiles and amphibians can have the dual benefit of leading to effective conservation and meeting public needs.

### Position On Sustainable Use of Reptiles and Amphibians

Partners in Amphibian and Reptile Conservation (**PARC**) brings together stakeholders from many perspectives. Our challenge has been to find common ground on which effective and practical policy and regulatory guidance for sustainable use can be formulated. Our position on the sustainable use of reptiles and amphibians is:

*“**PARC** members are committed to managing reptile and amphibian populations in a sustainable manner that will integrate the conservation, protection, use, and enhancement of their populations, habitats, and ecosystems.”*

To further support and help our members and non-members implement sustainable reptile and amphibian management actions, **PARC**'s committee on Policy, Trade, and Regulation has modified a set of management principles developed by the Western Association of Fish and Wildlife Agencies. These model principles can be used as guidelines by **PARC**, its member

organizations, private landowners, conservation organizations, state and federal government agencies, local governments, and the public to evaluate the sustainability of reptile and amphibian uses. These guidelines combine both ideal and practical components of sustainable use. The extent to which the guidelines are used by a member organization will be influenced by its legal authority, resource base, population demographics, culture, constituent expectations, local politics, and other constraints.

Whatever form or practice sustainable use takes, adoption, implementation, and advocacy of this position will assure the public that **PARC** and its member organizations continue to be leaders in reptile and amphibian conservation.

## **MODEL PRINCIPLES FOR SUSTAINABLE REPTILE AND AMPHIBIAN USE**

### **A Shared Vision**

A sustainable society is one that can persist over generations, one that is sufficiently farseeing, flexible, and wise not to undermine either its natural resource systems or its social systems of support. In the present millennium, there will undoubtedly be increasing demands for reptiles and amphibians and on the environment. In recognition of this, **PARC**:

1. Affirms and renews its commitment to sustainable natural resource management;
2. Understands that reptiles and amphibians are important components of human society, local economies, and ecosystems;
3. Understands that sustaining reptile and amphibian populations is a responsibility greater than any one agency or one country can manage, and requires the collective actions of the public and private sector;
4. Understands that successful implementation of sustainable management practices will require cooperation among **PARC** members;
5. Understands that, to be sustainable, conservation practices must be biologically and economically sound, and socially acceptable;
6. Understands that all individuals who may be affected by reptile and amphibian management in a region, should have an opportunity to participate in the development of sustainable conservation practices;
7. Understands that achieving sustainable use of reptiles and amphibians will require the integration of planning, organization, and management actions, and stability of funding for management agencies;
8. Understands that achieving sustainable management of reptiles and amphibians will require the support of the majority of the public;

9. Believes that implementing sustainable management fulfills the will of the people to conserve and protect reptiles and amphibians for the benefit of present and future generations of humans and non-human species.

**PRINCIPLES AND CRITERIA FOR SUSTAINABLE REPTILE AND AMPHIBIAN USE**  
**PARC** endorses the following principles and criteria to promote the sustainable management reptile and amphibian populations, their habitats, and their ecosystems.

### **Habitat Management**

1. Reptile and amphibian habitats should be protected and managed to maintain or restore historic productivity.
2. An adequate quantity and diversity of habitat should be protected and managed to sustain the full assemblages of native reptile and amphibian populations and other species.
3. Habitats should not be perturbed beyond their ability to quickly return to fully functional states.
4. Prior to approval, proposed habitat alterations should be assessed and potentially adverse effects should be avoided or minimized.
5. Effects of habitat loss and fragmentation should be minimized by user groups, regulatory agencies, and boards when making resource conservation and allocation decisions.
6. Degraded habitats should be restored to fully functional levels of productivity when possible. Surveys and monitoring programs should be conducted to determine the current status of the habitat and effectiveness of restoration activities as part of an adaptive management process.
7. The proposed use or introduction of reptiles and amphibians to a region or ecosystem in which they do not naturally occur (e.g. pets, commercial breeding farms, live fishing bait), must be carefully analyzed and weighed against the biological risks.

### **Population Management**

1. Reptiles and amphibians should be managed to maintain healthy populations, habitats, and ecosystem functions.
2. Species diversity should be protected and maintained at the population, species, and ecosystem levels.
3. Depleted populations and species should be allowed to recover or, when appropriate, be actively restored.

4. Temporal and geographic extent of populations should be assessed. Population monitoring programs should be appropriate to the scale and intensity of use or ecosystem value.
5. Population size goals should be established in a manner consistent with sustainable yield, and managed in a manner that maintains genetic and phenotypic characteristics, sex ratio, age structure, etc.
6. All impacts of commercial and noncommercial consumption, scientific collection, and other human-induced mortality (e.g. roads, urban sprawl) should be considered in management planning. Other impacts that should be considered include natural predation, invasive species, pathogens, pollution, and climate change.
7. Population goals should be achieved in a manner consistent with protection of non-target populations or species and adverse effects of introduced or enhanced populations should be assessed and minimized.
8. The function of reptiles and amphibians in an ecosystem should be considered in management decisions and when setting population goals.
9. Population trends, natural or human influenced, should be monitored and considered in harvest management decisions. Species should not be harvested unless the agency's monitoring efforts or best biological opinion demonstrate there is a harvestable surplus.

### **Management System**

1. All relevant biological, technological, economic, social, and environmental aspects should be used to guide science-based management actions and regulate human activities.
2. Reptiles and amphibians should be managed for multiple benefits when possible. Uses should be compatible with other resource uses and should not be detrimental to other populations, species, their habitats, or their ecosystems. Management decisions should take into account economic and social impacts, just as economic and social decisions should reflect environmental concerns.
3. Management objectives should be provided in the form of science-based management plans, strategies, guiding principles, and policies, and integrated with other resource planning processes.
4. Management agencies should use management systems that are effective in protecting habitats and controlling human-induced sources of mortality, and incorporate appropriate procedures to assure effective monitoring, compliance, control, and enforcement.

5. There should be joint assessment and management of species that cross state and international jurisdictional boundaries. Monitoring, compliance, control, and enforcement should be coordinated with landowners, local governments, agencies, states, or nations.
6. Mechanisms for the collection and dissemination of information necessary to carry out management activities should be developed and used.
7. Management programs and decision-making procedures should clearly distinguish between, and effectively deal with, biological and resource allocation issues.
8. Adequate staff and budget for surveys, monitoring, research, management, and enforcement activities should be available to implement sustainable management principles.

### **Public Involvement**

1. Management systems that produce public information or encourage involvement for sustained use of reptiles and amphibians should be developed.
2. Reptiles and amphibians should be managed to assure adequate public access, without detriment to the species, population, habitat, or ecosystem.
3. Programs to encourage and involve private landowners in sustainable management of reptiles and amphibians and their habitats should be created or expanded.
4. Information and agency decisions about reptiles and amphibians should be disseminated to all interested parties in a timely fashion.
5. Regulatory and management decisions should be made in a fair, informed, timely fashion in an open process, using the best information available, and provide for integrated resource management, public input, and review.
6. Public information and education programs should include materials on the biological importance of reptiles and amphibians, habitat requirements, threats, population status, and regulatory processes.

### **Management Approach**

1. Management programs should be science-based and address uncertainty and information gaps.
2. Management should be prioritized, timely, responsive, and based on the best available scientific information.
3. In the face of uncertainty or conflicting data, reptile and amphibian populations and their habitats and ecosystems should be managed conservatively.

4. Management programs should be adaptive and incorporate current research and monitoring results to resolve problems or deficiencies.
5. Research and monitoring should be used to improve scientific, technical, and public knowledge of reptiles and amphibians.
6. Scientific information on the status of populations and the condition of their habitats should be routinely updated.