

by Ernesto Garcia,¹
Priya Nanjappa Mitchell,² and
Dede Olson³

Partners in Amphibian and Reptile Conservation

With amphibians and reptiles declining more dramatically than any other vertebrate group on the planet, what can be done? Around the globe, efforts are underway to determine the causes and develop solutions to amphibian and reptile declines, extinctions, and range reductions. Partners in Amphibian and Reptile Conservation (PARC) leads a United States-based effort dedicated to “keeping common species common,” thus averting the need to list more species as endangered.

Established in 1999, with a mission to conserve amphibians, reptiles, and their habitats through public/private partnerships, PARC has gained momentum through its first decade and has its strategy for success charted to the year 2020.

A partnership of citizens, scientists, and resource managers, PARC includes representative of 11 federal agencies, all U.S. states, several Canadian provinces, tribes, conservation organizations, universities, professional and hobbyist herpetological organizations, research laboratories, environmental consultants, nature centers, zoos, and the forest products, energy and pet trade industries. Anyone can be an active member. PARC’s emphasis is on the conservation of both amphibians and reptiles (i.e., herpetofauna), and its focus extends beyond species that are imperiled.

PARC has regional working groups in the Southeast, Northeast, Midwest, Northwest, and Southwest, in addition to several active state groups. Recent efforts initiated with partners in Mexico,



An adult red-legged frog (*Rana aurora*) using restored wetlands at Sooke, Vancouver Island, BC, Canada.

Tom Biebighauser

Canada, and the Caribbean are broadening PARC’s reach.

The challenges facing amphibians and reptiles today include the loss, fragmentation, and alteration of habitats; environmental contamination; global climate change; disease; unsustainable use; and invasive species. PARC members address specific threats at the regional and national levels through the development of science-based products and services designed to guide herpetofaunal conservation. They also invite the participation of “non-traditional” partners.

Science-Based Products and Services

Responding to the greatest threat facing amphibians and reptiles, PARC launched its flagship conservation tool, the award-winning Habitat Management Guidelines Technical Series ([\[place.org/habitat_management_guide\]\(http://place.org/habitat_management_guide\)\). These guides are unique in that they consider not only “ideal” recommendations but also “maximizing compatibility” recommendations for use when conservation of herpetofauna or habitat is not an activity’s primary management objective.](http://www.parc-</p>
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To address the lack of information on the status of many amphibians and reptiles, and to assist resource managers who do not have expertise in herpetology, PARC developed an Inventory and Monitoring Handbook that provides field-tested, peer-recommended survey techniques for all U.S. and Canadian herpetofauna (www.parcplace.org/inventory_monitoring).

In addition, PARC provides informational brochures aimed at increasing environmentally responsible behavior towards amphibians, reptiles, and their

habitats (visit www.pareplace.org/publications_resources.html).

Among PARC's newer conservation tools is a suite of "train-the-trainer" courses to accompany the Habitat Management Guidelines and Inventory and Monitoring Handbook. This is being expanded to increase state and local training opportunities and to facilitate capacity-building for those engaged in management.

PARC symposia and conferences bring researchers, managers, and other stakeholders together for discussions on how to address some of the world's most serious conservation challenges. A successful 2007 PARC co-sponsored symposium, Amphibian Declines and Chytridiomycosis: Translating Science into Urgent Action, convened more than 200 participants from nine countries representing four continents. Additional PARC symposia on conservation topics of global significance are being considered.

National Conservation Initiatives

National initiatives bring PARC members and partners together on specific emerging topics. A Roads Task Force was chartered to partner with transportation agencies in addressing passage, connectivity, collision, and other transportation issues that affect amphibian and reptile habitat and mortality. PARC launched a Development Subgroup to work with developers and builders in addressing the effects of residential and commercial development. Another initiative, Important Herp Areas, aims to promote and to help prioritize protection, restoration, or acquisition of critical areas for priority species. A Relocation, Reintroduction, Translocation, and Headstarting Task Team is developing information to guide moving animals when this approach is necessary.

The newest addition to the partnership mission is "Friends of PARC," a non-profit organization that secures and

distributes funds to implement PARC's strategic goals. It affords citizens and corporations an opportunity to make tax-free contributions for herpetological conservation.

2020 Vision

The successes PARC has achieved to this point can be credited to its broad base of support, the visionary and flexible nature of its partnerships, and its adaptability to new needs and opportunities. In its second decade, PARC will focus on emerging issues such as climate change, disease, and other global threats to herpetofauna. PARC is expanding its partnerships beyond geographic and political borders, and plans to integrate with other habitat-based conservation efforts to benefit other wildlife. Because effective conservation cannot be accomplished without partners, these cross-cutting efforts will be key to maintaining healthy amphibian and reptile populations until 2020 and beyond.

In one example of a PARC project, Northwest PARC co-chair Elke Wind partnered with Tom Biebighauser from the Center for Wetlands and Stream Restoration September 2008 to improve habitat for amphibians on Vancouver Island, British Columbia. The objective of the project, funded by BC Hydro, was to build small wetlands that could be used by native amphibians to compensate for habitat lost from historic dam and reservoir construction. Wind approached Island Timberlands, the private forestry company owning lands around the reservoir, who readily agreed to participate in the construction of nine wetlands. Biologists hope the threatened red-legged frog (*Rana aurora*) will use the new wetlands for breeding. Reproduction by this declining species has been confirmed by Wind and Dr. Purnima Govindarajulu (BC Ministry of Environment herpetologist) at two other wetlands Biebighauser created in 2005

near Sooke on Vancouver Island. Wind and Biebighauser also instructed a successful wetland construction workshop for the project, attended by representatives from consulting companies, government, and other organizations.



Shallow depression filled with logging debris that held water only for short periods.



Debris was removed and the depression deepened. Wetland plants were returned, along with some woody debris, and the area was seeded with winter wheat to prevent erosion.

¹Ernie Garcia (ernest_garcia@fws.gov) is the PARC National Federal Agencies Coordinator, based out of the Northeast Region, US Fish and Wildlife Service, Hadley, MA office, but remotely stationed in Weaverville, CA.

²Priya Nanjappa Mitchell (pnanjappa@fishwildlife.org) is the State Liaison to PARC, and she leads the amphibian and reptile conservation and policy efforts for the Association of Fish & Wildlife Agencies, headquartered in Washington, DC.

³Dr. Dede Olson (dedeolson@fs.fed.us) is a Co-chair of NW PARC, and a Research Ecologist with the Aquatic and Land Interactions Research Program of the Pacific Northwest Research Station, US Forest Service, in Corvallis, OR.

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Telephone: 703-358-2390
Fax: 703-358-1735
E-mail: esb@fws.gov

Web site:
www.fws.gov/endangered/bulletin.html

Editor
Michael Bender

Art Director
Jennifer Hennessey

Contributors	Catherine Nishida
Paul Boyle	Nathan Schroeder
Shelly Grow	Rachel Muir
Vicky Poole	J. Michael Scott
Jim Rorabaugh	Kathryn McEachern
Melissa Kreutzian	Steven T. Knick
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Mark Higley	



Cover: The distinct population segment of the fisher (*Martes pennanti pacifica*) in California, Oregon, and Washington is a candidate for Endangered Species Act protection. The Hoopa Tribe in California is conducting research on its status (see story on page 28).
credit: ©Tom Vezo/naturepl.com

Inside cover: Habitat of the golden frog in Panama (story on page 7).
credit: Paul Crump/Houston Zoo, Inc.

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The Bulletin welcomes manuscripts on a wide range of topics related to endangered species. We are particularly interested in news about recovery actions and conservation partnerships.

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