US Fish and Wildlife Service Division of International Conservation Wildlife Without Borders-Amphibians in Decline Fund Project Summary FY 2010

13 Grants Total FWS Funding \$358,482.00 Total Leveraged Funding \$783,792.30

Argentina

AD-0017: Building Capacity for Amphibian Conservation in Argentina and Beyond. In partnership with Durrell Wildlife Conservation Trust. This grant will support the training of a minimum of 100 amphibian conservation biologists from across Latin America in the principles and practice of amphibian conservation husbandry. The project will produce an Amphibian Conservation Needs Assessment (ACNA) for Argentinian amphibians, and will develop a husbandry plan with institutions in Argentina for the establishment of captive populations of at least two threatened, endemic amphibian species.

FWS: \$29,970.00 Leveraged funds: \$16,610.00

Australia

AD-0045. Understanding Immunity to chytridiomycosis to Improve Reintroduction Success. In partnership with the James Cook University. This grant will support a project that compares immune mechanisms including gene expression between species of frogs resistant and susceptible to chytrid fungus. The research will investigate populations of one species of frogs with differential susceptibility within the species, and compare exposed, treated, and re-exposed frogs to investigate the potential for adaptive immunity and vaccination. The practical applications of this project include efficiently selecting immune frogs for breeding to produce frogs resistant to the fungal disease, screening frog populations to predict their risk of decline, and developing targeted vaccines.

FWS: \$29,280.00 Leveraged funds: \$280,910.00

Bolivia

AD-0010: *Bolivian Amphibian Initiative.* In partnership with the Museo de Historia Natural Alcide d'Orbigny. This project will provide information regarding ecological requirements, population status, and determination of the presence of *Bd*, or chytrid, fungus in the *Telmatobius* species of aquatic frogs. The grantee will develop an *in situ* amphibian conservation training program for local community members and Bolivian biologists; increase awareness about the amphibian crisis in local communities and the general public through outreach activities, exhibitions, and media; and set up a captive breeding facility in the Museo de Historia Natural Alcide d'Orbigny with two species of *Telmatobius* for research and education purposes.

FWS: \$30,000.00 Leveraged funds: \$31,200.00

Colombia

AD-0004: Lowland Harlequin Frogs of Colombia: Rescue and Monitoring of the Last Viable Populations. In partnership with Universidad de los Andes. This grant will support efforts to establish a viable *ex situ* husbandry program as an emergency conservation action for three species of lowland harlequin frogs (genus Atelopus), and will survey for the presence and prevalence of Bd, or chytrid, fungus at two sites on Gorgona Island and the Caribbean coast of Colombia near Panama.

FWS: \$29,502.00 Leveraged funds: \$26,875.00

AD-0019: Exploration Campaign for the Lost Amphibians of Colombia. In partnership with Global Wildlife Conservation. This project will identify surviving populations of 'lost' amphibians so that swift conservation actions can be taken to protect their remaining habitats. Funding will support strengthening the capacity of Colombians to undertake field explorations that continue to provide the data needed to focus conservation action, and will support environmental outreach with local communities about the project goals and the unique and endangered amphibians in their environment.

FWS: \$29,900.00 Leveraged funds: \$42,900.00

Ecuador

AD-0013: Amphibian Conservation Center – Mazán, Ecuador. In partnership with The Philadelphia Zoological Gardens. This grant will support activities to rescue critically endangered amphibian species (Atelopus exiguous, Atelopus nanay, Gastrotheca pseustes, and Hyloxalus vertebralis) from the verge of extinction by increasing the size of assurance colonies. The grantee will identify and mitigate the causes of amphibian decline in Cajas National Park and Mazán Forest in Ecuador; determine the presence of Bd, or chytrid, fungus and introduced trout in natural habitats and their effect on the target species; build capacity at the local level to conduct ecological monitoring of endangered amphibian species in protected areas; and promote awareness of the local and global amphibian crisis by engaging in community education campaigns and disseminating project results.

FWS: \$30,000.00 Leveraged funds: \$59,000.00

India

AD-0018: Establishing a protected area network for the threatened amphibians of the Western Ghats, India. In partnership with Global Wildlife Conservation. This project will develop action plans for priority endangered amphibian habitats. These will then be compiled into a National Management Plan for Threatened Amphibians of the Western Ghats and made available to the Ministry of Environment and Forests for adoption.

FWS: \$25,000.00 Leveraged funds: \$110,990.00

Mexico

AD-0058: Conservation, Management, and Sustainable Use of A. ordinarium in the Ejido of Tumbisca, Michoacán. In partnership with the Universidad Nacional Autónoma de México, A.C. This project will investigate the status of the A. ordinarium population, develop actions to conserve the species, create an education and ecotourism program, establish the basis for a breeding in captivity program, and train local people to participate and manage the aforementioned programs.

FWS: \$23,215.00 Leveraged Funds: \$7,680.00

AD-0060: Ex situ *Conservation and Management of Two Species of Endemic Ambystoma in the State of Michoacán, Mexico*. In partnership with Universidad Michoacana de San Nicolás de Hidalgo. This project will apply scientific and technical knowledge to create a system to reproduce two species of *Ambystoma (A. andersoni and A. dumerilii)*, create a monitoring program for both species, develop breeding modules, raise awareness among local communities for the conservation of the species, and train and educate local communities and fishermen on captivity techniques to implement the breeding modules for these species.

FWS: \$14,334.00 Leveraged Funds: \$20,468.00

AD-0062: Recovery of a Critically Endangered Species, the axolotl Ambystoma mexicanum, in Refuges of Xochimilco, Mexico City. In partnership with Restauración. This project seeks to restore the habitat of

Ambystoma mexicanum in the agricultural-lacustrine system of Xochimilco. This project will create refuges for A. mexicanum in along the agricultural canals of agricultural refuges, restore the food web of the agricultural refuges, relocate endangered axolotls to the refuges, train local farmers on the conservation and management of the refuges, and develop an action plan describing the practices to restore refuges for the conservation of *A. mexicanum* populations.

FWS: \$29,715.00 Leveraged Funds: \$25,812.30

AD-0064: Ex situ *Reproduction of Upland burrowing treefrog (Smilisca dentata) in State of Aguascalientes, Mexico*. In partnership with Conservación de la Biodiversidad del Centro de México, A.C. This grant will support a captive breeding program for *S. dentata*, including research to determine the biotic and abiotic factors that will help sustain the species in captivity. The recipient will develop a methodology to successfully reproduce the species in captivity.

FWS: \$30,624.00 Leveraged Funds: \$16,087.00

Panama

AD-0015: Expanding Amphibian Rescue and Conservation Efforts in Eastern Panama. In partnership with Smithsonian Institution. This project will seek to prevent the extinction of at least one species of highly endangered frog, Atelopus glyphus, threatened by the advancing wave of chytridiomycosis, or chytrid fungus, in Eastern Panama. The grantee will outfit an amphibian rescue pod with equipment to house a colony of the species in a biosecure unit at the Summit Municipal Park, and use the colony's offspring to re-establish a wild population.

FWS: \$31,802.00 Leveraged Funds: \$31,885.00

Peru

AD-0037: Conserving Peru's Lake Titicaca Frog. In partnership with the Denver Zoological Foundation. This project will promote the sustainable conservation and protection of Lake Titicaca frogs and their habitat by increasing understanding of the biological diversity of Lake Titicaca frogs, creating an assurance population of *Telmatobius coleus*, decreasing the local harvest of Lake Titicaca frogs, building local capacity to conserve the frogs, and disseminating a holistic conservation program through the amphibian crisis education center at the Huachipa Zoo, as well as with the scientific and environmental education communities.

FWS: \$25,140.00 Leveraged funds: \$113,375.00