



BUSINESS PLAN AND PROJECT PROPOSAL

Project: Paws & Hatchlings: One Health for Coastal Wildlife (*Patas y Crías: Una Sola Salud para la Vida Silvestre Costera*)

Executing Organization: Wildlife Rescue and Conservation Association (*Asociación de Rescate y Conservación de Vida Silvestre - ARCAS*) · South Coast

Location: Hawaii Multiple Use Area (*Área de Uso Múltiple Hawaii - AUMH*), Chiquimulilla, Santa Rosa, Guatemala

Execution Period: 12 Months

Total Budget Required: USD 40,000

1. EXECUTIVE SUMMARY

The "Paws & Hatchlings: One Health for Coastal Wildlife" project is a strategic conservation and social veterinary intervention initiative designed to protect the marine-coastal biodiversity of the Hawaii Multiple Use Area (AUMH) in Guatemala. By applying the international One Health approach, the project directly addresses the overpopulation and health status of approximately 4,000 to 5,000 feral and free-roaming dogs and cats that pose a direct threat to the region's protected species.

Through a comprehensive 12-month plan, ARCAS will implement mass vaccination drives, scheduled surgical sterilizations, clinical veterinary care, and community responsible ownership workshops across 6 key coastal communities. With a total budget of USD 40,000, the proposal ensures the sustainability of the coastal ecosystem, the reduction of zoonotic pathogens, and the strengthening of local public health.

2. ABOUT THE ORGANIZATION: ARCAS SOUTH COAST

The Wildlife Rescue and Conservation Association (ARCAS) is a Guatemalan non-profit organization with over two decades of experience in natural resource conservation. On the South Coast of Guatemala, ARCAS serves as the official co-manager of the Hawaii Multiple Use Area (AUMH) in coordination with the National Council of Protected Areas (CONAP).

ARCAS Strategic Lines in the Region:

- **Marine-Coastal Conservation and Sea Turtles:** Management of hatcheries, nesting monitoring, and release of olive ridley sea turtle (*Lepidochelys olivacea*) hatchlings and other threatened species.

- **Ecosystem Restoration:** Protection and reforestation of mangrove forests essential for the reproduction of aquatic and estuarine fauna.
- **Wildlife Rehabilitation:** Rescue, medical care, and reintroduction of endangered native fauna.
- **Environmental Education and Community Development:** Awareness programs to promote sustainable socioeconomic alternatives in local communities.

3. DIAGNOSIS AND JUSTIFICATION OF THE PROBLEM

The AUMH constitutes a vital ecosystem that harbors nesting sanctuaries for sea turtles, iguanas, crocodilians, shorebirds, and native mammals. However, the uncontrolled presence of between 4,000 and 5,000 free-roaming domestic animals generates a severe ecological imbalance:

1. **Direct Predation:** Dogs and cats heavily attack sea turtle nests (consuming eggs and newly hatched hatchlings), as well as juvenile iguanas and nesting birds.
2. **Resource Competition:** They displace native mesopredators, disrupting the local food web.
3. **Infectious Disease Transmission:** They act as vectors for lethal pathogens such as canine distemper, parvovirus, and rabies, transmitting them to wildlife and exposing human populations.

4. INTERVENTION MODEL AND STRATEGIC SOLUTION (ONE HEALTH)

ARCAS implements an operational model based on the international One Health framework, which recognizes the indelible interconnection between animal health, human health, and ecosystem integrity.

Key Program Components:

- **Mobile and Fixed Social Veterinary Clinic:** Deployment of veterinary medical services directly in areas of highest environmental impact.
- **Humanitarian Population Control:** Reduction of the feral animal birth rate through sustained surgical sterilizations.
- **Immunization and Sanitary Barrier:** Mass rabies vaccination campaigns to interrupt the transmission chains of zoonotic diseases.
- **Community-Institutional Capacity Building:** Strategic alliances with veterinary medicine faculties and educational workshops on responsible ownership.

5. OBJECTIVES AND MEASURABLE GOALS (12-MONTH INDICATORS)

Below are the operational goals and impact indicators scheduled for the project execution period:

Impact Indicator	Annual Goal (12 Months)	Quarterly Tracking Goal	Expected Impact
Rabies Preventive Vaccination	1,200 animals treated (4 intensive drives of 300/day)	300 animals / quarter	Eradication of rabies outbreaks and reduction of viral spillovers to native wildlife.
Surgical Sterilizations (Spay/Neuter)	240 animals sterilized (20 per month)	60 sterilizations / quarter	Prevention of thousands of unwanted predator births in the coastal zone.
Consultations & General Clinical Care	720 animals treated (60 per month)	180 animals / quarter	Substantial improvement in animal welfare and systematic deworming.
Community Coverage	6 coastal communities within the AUMH	1–2 communities served / quarter	Complete awareness raising among the local population within the protected area.

6. OPERATIONAL BUDGET AND FINANCING PLAN

The total budget required for the 12-month execution amounts to USD 40,000, structured under the following line-item breakdown:

Budget Line Item	Description / Operational Details	Total Amount (USD)
Medicines, Vaccines, and Surgical Supplies	Rabies/multivalent vaccines, anesthetics, surgical sutures, dewormers, antiseptics, and clinical disposables.	\$12,000
Veterinary Team and Professional Services	Fees and stipends for veterinary surgeons, field assistants, and social clinic staff.	\$9,000
Clinic Equipment and Infrastructure	Acquisition of autoclave, surgical instruments, diagnostic equipment, and clinical recovery cages.	\$7,000
Mobile Logistics and Field Transport	Fuel for marine vessels and land vehicles, transport of medical equipment to the 6 communities.	\$6,000



Community Education and Outreach	Organization of educational workshops, printing of educational materials, responsible ownership guides, and signage.	\$3,000
Monitoring, Data Records, and Reporting	Field data collection systems, quarterly impact tracking, photographic records, and institutional reports.	\$3,000
TOTAL REQUESTED	Total financing required for 12 months of operation	\$40,000

Institutional In-Kind Contribution (ARCAS Counterpart): ARCAS contributes the use of its permanent clinical facilities on the South Coast, executive and administrative management staff, as well as institutional coordination with the National Council of Protected Areas (CONAP) and the National Forestry Institute (INAB).

7. IMPACT, SUSTAINABILITY, AND SCALABILITY

- **Cumulative Protective Effect:** Each surgical sterilization intervention exponentially prevents the generation of new litters of feral animals, guaranteeing intergenerational protection for sea turtles and coastal fauna.
- **Institutional Sustainability:** Being integrated into ARCAS's permanent infrastructure and leveraging university partnerships for volunteers and interns, the model continues to operate beyond the project cycle.
- **Replicable Model:** It constitutes a highly cost-effective, scalable, and adaptable protected area management framework for other marine-coastal reserves in Central America facing similar conflicts between domestic animals and wildlife.