Integrating Social Science to Address Illegal Turtle Trade

Source: USFWS

Source: NYPLDC, Turtle Derby Race, World Fair. Learn More

Source: Gerhard Huber

Presented by the CCITT Human Dimensions and Communications Work Group

Friday, Feb. 16, 2024

Midwest Turtle Workshop: Enhancing Partnerships to Combat Poaching and Trafficking

1. Conservation Social Sciences and the Human Dimensions of Illegal Wildlife Trade

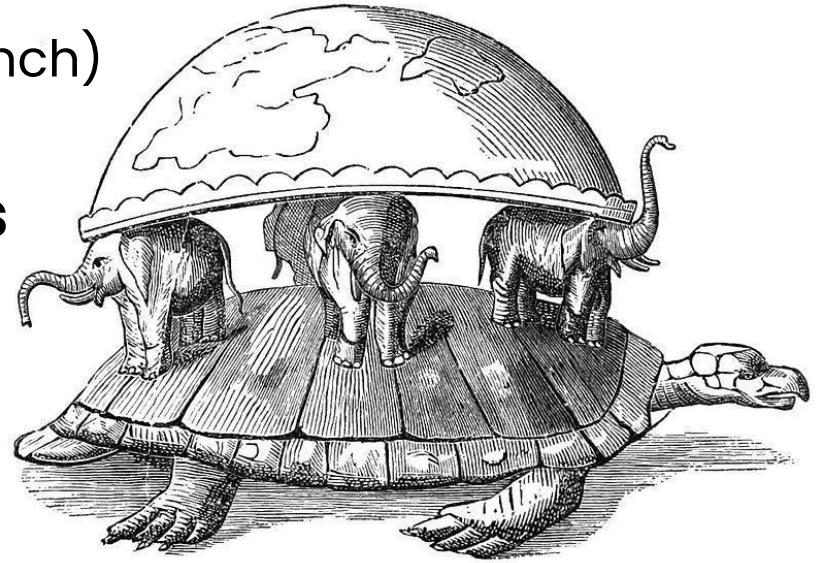
- Emily Gutierrez (USFWS, National Wildlife Refuge System)
- Dr. Emily Horton (USFWS, Combating Wildlife Trafficking Branch)

2. CCITT Human Dimensions & Communications Working Group

- Bridget Macdonald (USFWS)

3. Turtle Trade - Human Dimensions Research

- Zoie McMillian & Dr. Willandia Chaves (Virginia Tech)
- Dr. Rachel Boratto (Monitor)
- Michelle Anagnostou (University of Waterloo)
- Elle J. Xu (University of Maryland)



Turtles in World Mythology

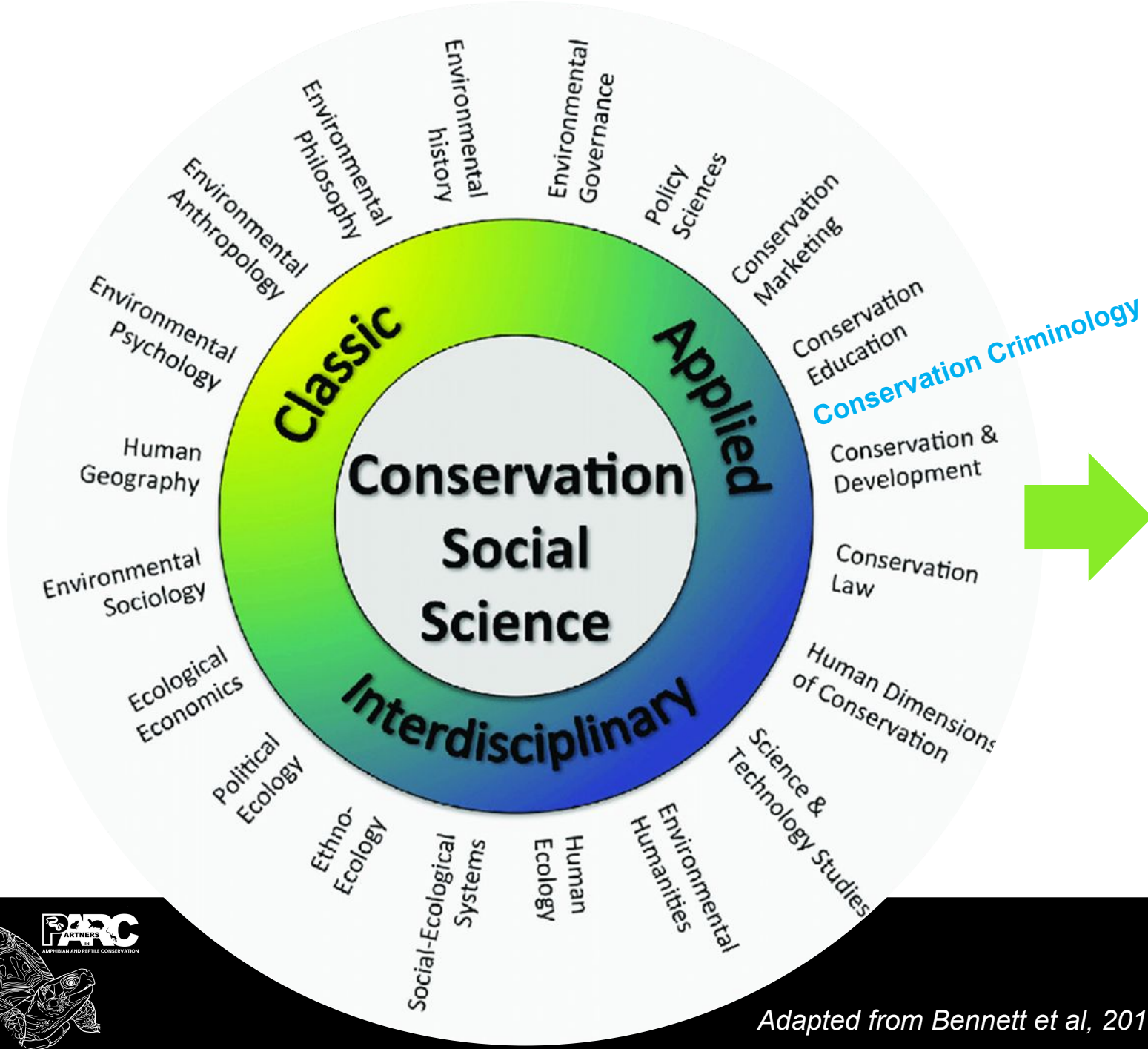
Source: An illustration of the “Hindu Earth” (1876), Popular Science.

Conservation Social Sciences and the Human Dimensions of Illegal Wildlife Trade

Emily Gutierrez, Social Scientist, U.S. Fish & Wildlife Service

Dr. Emily Horton, Social Scientist, U.S. Fish & Wildlife Service

What are the social aspects of conservation?



Conservation Criminology

Social Phenomena

- Norms
- Demographics
- Economics
- Governance

Social Processes

- Communicating
- Marketing
- Educating
- Decision Making

Individual Attributes

- Values/Beliefs
- Knowledge
- Perceptions/Preferences
- Behaviors

Adapted from Bennett et al, 2017

How does culture influence people's relationship with wildlife?

What are the social and economic drivers of conservation problems?

What motivates people to participate in the illegal wildlife trade?

How can we reduce demand for wildlife and wildlife products?

How can we collaborate more effectively across disciplines or jurisdictions?

How does conservation impact human well-being?

Social science approaches

Quantitative

- Closed-ended, numerical
- Deductive: test theories or hypotheses
- Statistical analysis of relationships
- More people, less depth

Qualitative

- Open-ended, words & pictures
- Inductive: develop theories or hypotheses
- Coded for patterns, themes, categories
- Less people, more depth

Common research methods

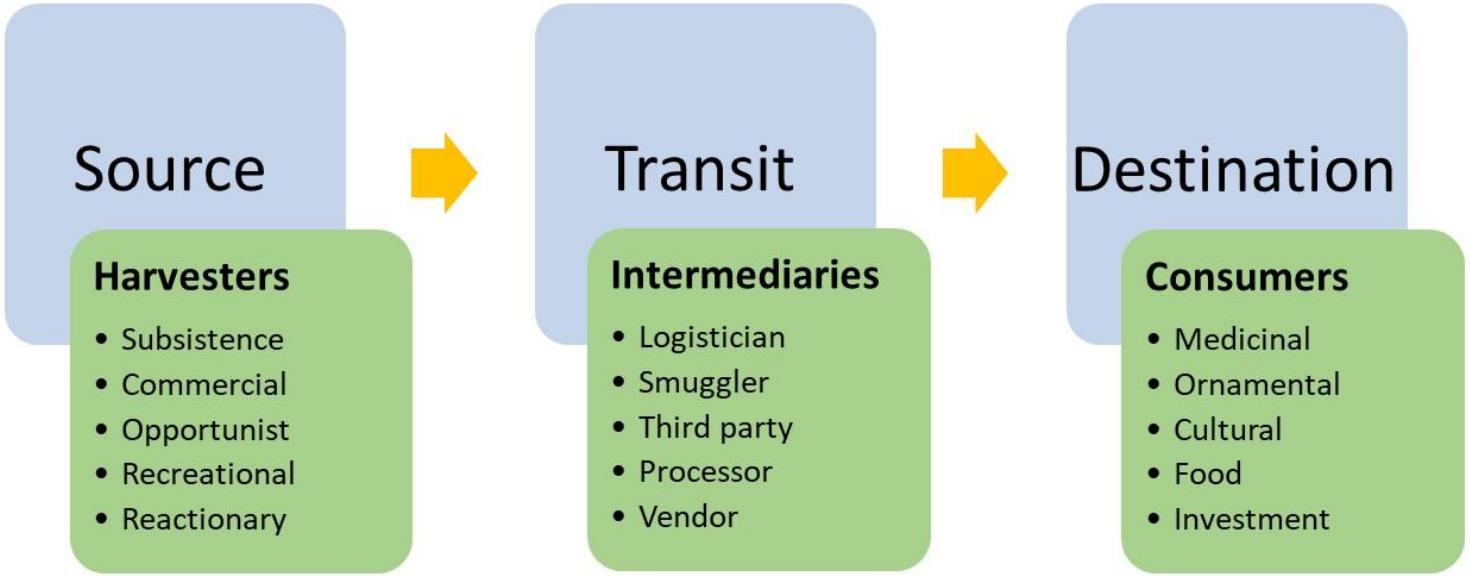
- Surveys – mail, phone, web
- Interviews
- Focus groups
- Behavioral observation
- Stakeholder analysis
- Content analysis
- Participatory mapping
- Social network analysis
- Economic valuation

Wildlife Trafficking: A Wicked Problem

- Occurs in complex socio-ecological systems
- Varies by species and context

Image Source: Routes

Browne et al. 2021

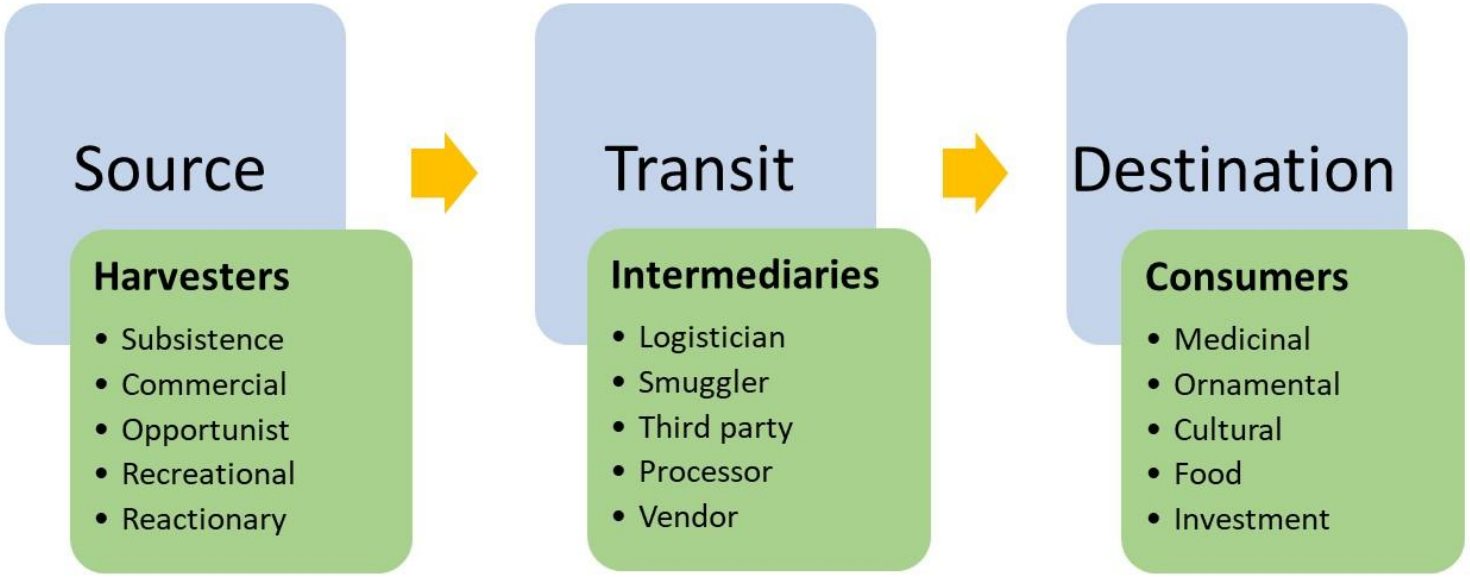


Wildlife Trafficking: A Wicked Problem

- Occurs in complex socio-ecological systems
- Varies by species and context
- Diverse actors, motivations, behaviors

Figure adapted from Phelps et al. (2016)

Browne et al. 2021



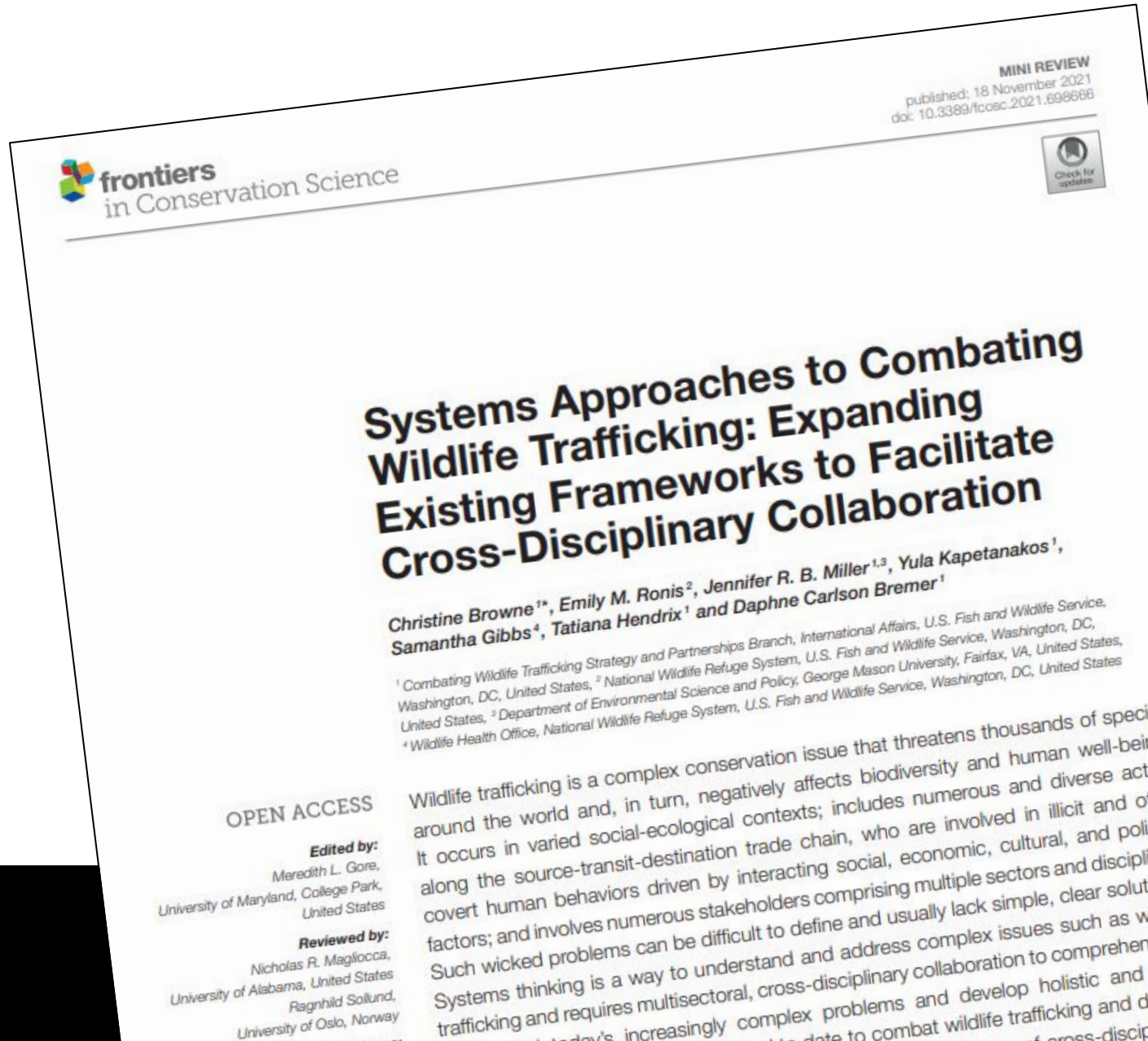
Wildlife Trafficking: A Wicked Problem

- Occurs in complex socio-ecological systems
- Varies by species and context
- Diverse actors, motivations, behaviors

Requires systems thinking with cross-disciplinary, multi-sectoral collaboration that results in holistic intervention strategies

Figure adapted from Phelps et al. (2016) Browne et al. 2021

Integrating social sciences



frontiers in Conservation Science

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Systems Approaches to Combating Wildlife Trafficking: Expanding Existing Frameworks to Facilitate Cross-Disciplinary Collaboration

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Wildlife trafficking is a complex conservation issue that threatens thousands of species around the world and, in turn, negatively affects biodiversity and human well-being. It occurs in varied social-ecological contexts; includes numerous and diverse actors along the source-transit-destination trade chain, who are involved in illicit and often covert human behaviors driven by interacting social, economic, cultural, and political factors; and involves numerous stakeholders comprising multiple sectors and disciplines. Such wicked problems can be difficult to define and usually lack simple, clear solutions. Systems thinking is a way to understand and address complex issues such as wildlife trafficking and requires multisectoral, cross-disciplinary collaboration to comprehensively [illegible] today's increasingly complex problems and develop holistic and novel [illegible] date to combat wildlife trafficking and discuss [illegible] of cross-disciplinarity

Understanding the Socio-Ecological Context of the Illegal Freshwater Turtle and Tortoise Trade

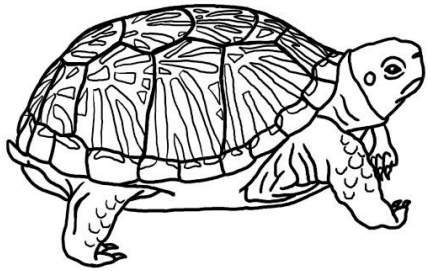
USAID
UNITED STATES AGENCY INTERNATIONAL DEVELOPMENT

U.S. FISH & WILDLIFE SERVICE
DEPARTMENT OF THE INTERIOR

CCITT
COLLABORATIVE TO COMBAT THE ILLEGAL TRADE IN TURTLES

FOS
IMPROVING CONSERVATION

PARC
PARTNERS IN AMPHIBIAN AND REPTILE CONSERVATION



Priority Strategies (sample)

- Reduce demand through evidence-based behavior change efforts based on market and social science research
- Develop a legal framework to strengthen protections
- Increase capacity to house confiscated turtles and improve confiscation outcomes
- Improve law enforcement training and informational resources