

An underwater photograph of a coral reef. The coral is a branching, brownish-green species, possibly a type of staghorn coral. A small, striped fish is visible swimming near the coral. The water is clear and blue-green.

Human Dimensions of Coral Reef Management

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An underwater photograph of a coral reef. The water is clear and blue. The coral is diverse, with some branching and some more massive. A small fish is visible in the background. The title 'Introduction' is centered at the top in a large, black, sans-serif font.

Introduction

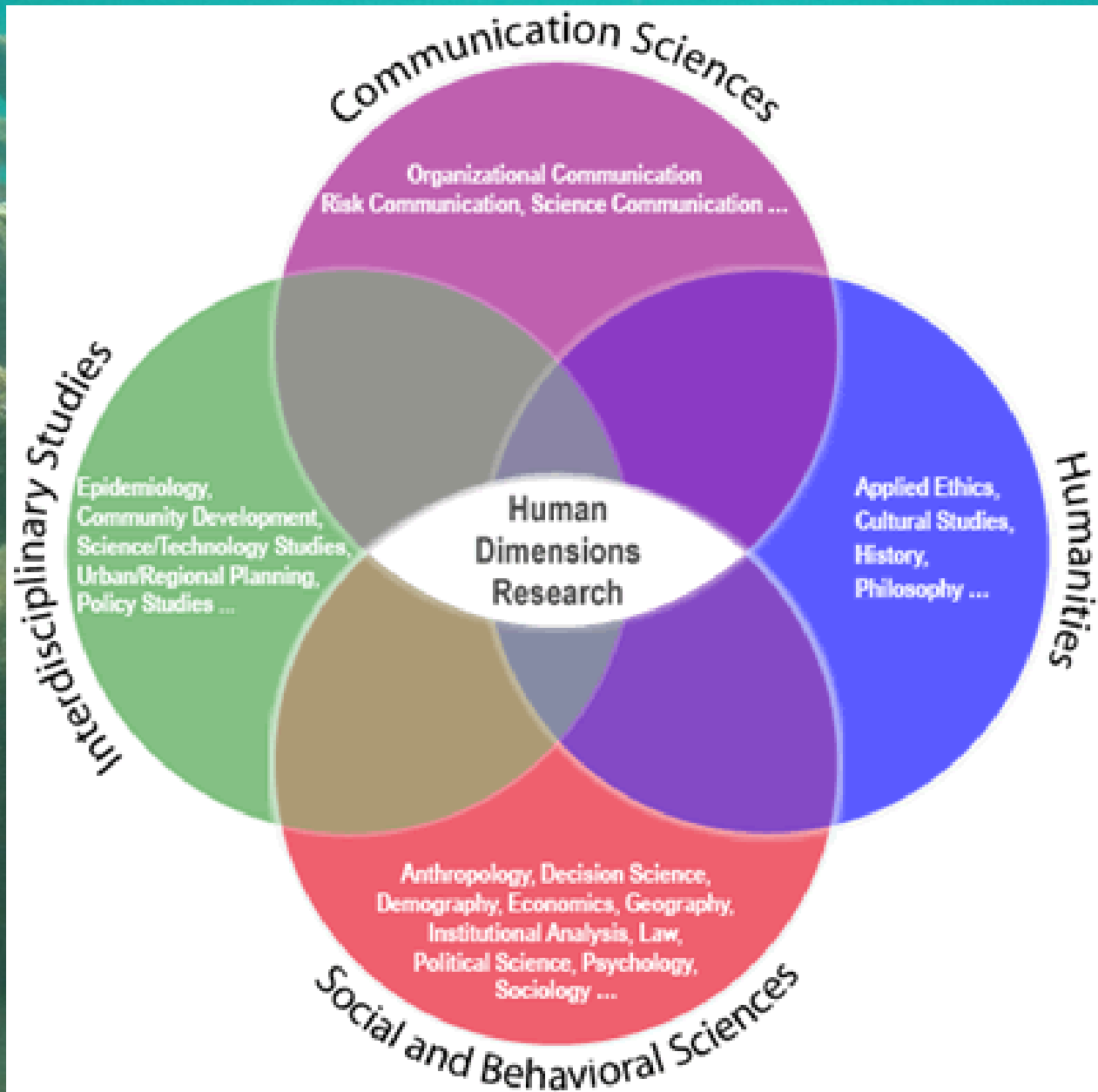
- This introductory session seeks to accomplish the following:
 - 1. Introduce the topic of human dimensions
 - That is, what are human dimensions?
 - 2. Survey (partially) the human dimensions of coral reef ecosystems
 - Or, how do human dimensions relate to coral reef ecosystems?

An underwater photograph of a coral reef. The water is a clear, light blue-green. In the foreground, there are large, branching coral structures. A small, striped fish is visible near the center of the frame. The overall scene is bright and clear.

Human Dimensions

- What are Human Dimensions?

Human dimensions include the ways through which individuals, groups, and society interact with, affect, and are affected by the natural environment and environmental change
(www.hd.gov)



Human Dimensions (taken from NCCOS)

Human Dimensions of Coral Reef Ecosystems



- Half a billion rely on coral reef for food and income
- In the Florida Keys, commercial fisheries are closely tied to spiny lobster, reef finfish, and other species that spend part or all their life stages on coral reefs

Human Dimensions of Coral Reef Ecosystems



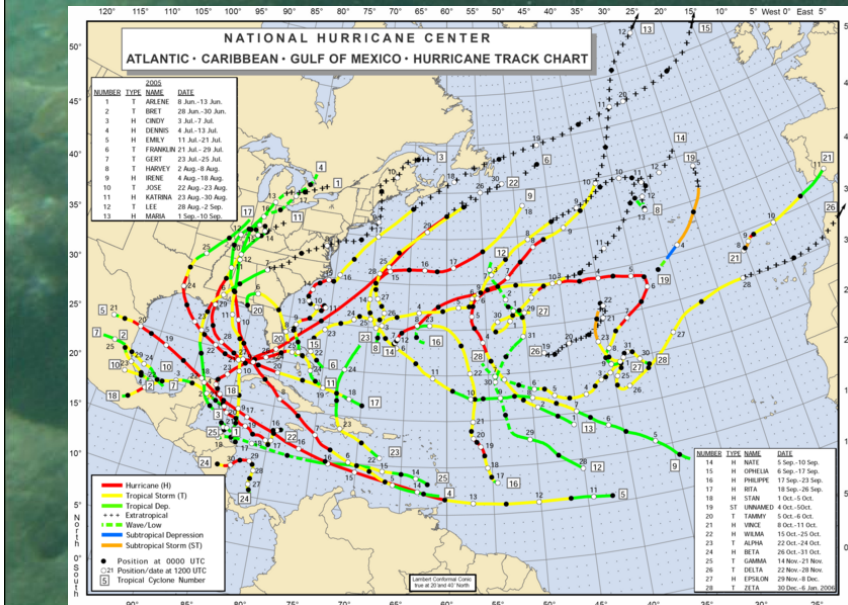
- Millions of people recreate near, over and on coral reefs, although not always in a sustainable manner
- In southeast Florida, recreational users spent \$2.9 billion in coral reef ecosystem-based activities in 2001

Human Dimensions of Coral Reef Ecosystems



- Coral reefs serve essential coastline functions for humans, by providing storm damage protection and preventing coastal erosion

– These functions are all the more missed when active seasons are combined with human-altered coastlines



An underwater photograph of a coral reef. The water is clear and blue. The coral is brown and yellowish, with some small fish visible. The title 'Reef Resilience' is overlaid in the upper center.

Reef Resilience

- Now that we know a little bit more about human dimensions, let us consider reef resilience
- FRRP defines resilience as:

The ability of (ecological, social, and socio-ecological) systems to absorb disturbances, to resist phase shifts, and to regenerate and reorganize in order to maintain key functions and processes in a time span relevant to resource use and management activities

Human Dimensions of Reef Management

- Taken together, the human dimensions of reef management refer to the:
 - Linkages between the human dimensions' uses, valuation, and perceptions of coral reef ecosystems and the resilience of coral reefs;
 - Relationships between the management strategies undertaken to protect coral reefs and attributes people value in coral reef ecosystems;
 - Responses within uses and valuation to changes in coral reefs over time;
 - Integration of the human and biophysical dimensions of coral reef management

Human Dimensions of Reef Management

- A working definition of the human dimensions of reef management (or coral reef ecosystem management) is presented as:

an inquiry of the linkages between the human and biophysical dimensions of reef resilience, of management strategies employed to address coral reef health, and of individuals and groups who depend on and recreate in coral reef ecosystems



Themes considered in the Human Dimensions of Coral Reef Management

- 1. Perceptions on resource conditions
- 2. Perceived threats and stresses to coral reef and associated ecosystems
 - Especially as related to views on climate change and changes in water quality
- 3. User conflicts