Research in Protected Areas: Using FIRE to Fight Fire

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Fraser Island
Unique scientific laboratory

- biodiversity
- terrestrial
  - spatial variation
  - temporal (successional)
- lacustrine diversity (swamps, lakes)
- marine and coastal landscape and biological diversity

Globally protected area laboratory

- management issues (activities, restrictions, numbers….)
- user issues (Traditional/European, eco-aware/frontier thinkers, nationals/internationals….)

The Nature and Conduct of Research

- Has largely been:
  - institutional
  - disciplinary
  - mercenary
  - Why? Easy (20thC institutional model)

- Platform now exists for improved collaboration:
  - multi-institutional (international?)
  - interdisciplinary - transdisciplinary
  - community based and empowered (regional engagement)

Collaboration Opportunities
Value of….
alliance/network seeking mutually beneficial outcomes (requires trust, cooperation, mutual benefit)

> OECD 1998 "..society's major problems, such as … environmental..." can no longer be addressed within the confines of individual disciplines or indeed within individual institutions.

The benefits of collaboration

- creation of critical mass in research skills
- enhanced capacity for new knowledge

- cross fertilization of ideas - new insights, better outcomes
- enhanced companionship and peer recognition
- decreased lag time to practical application

Barriers to collaboration
- Structural - management of funds, disparity of scale
- Organisational - IP, culture and values, permits
- Geographical - distances and associated costs

The FIRE Vision

a whole of university approach

- To promote collaborative, international standard, research and education, focussing on the environment and management of world heritage areas.
- To provide a platform for research and educational opportunities linking globally protected areas

Areas of Strength
- Environmental Epidemiology
- Sustainable Community Development
- Biodiversity, Conservation and Restoration
- Biodiscovery to Improve Human and Environmental Health
- Estuarine, Coastal and Ocean Research
- Environmental Planning and Management
- Environmental and Climate Change
- Sustainable Tourism

Kingfisher Bay Research Facility

- Focus on advanced level environmental and eco-tourism research
- Laboratory, office and teaching space
- Field equipment
- Education - rangers and university groups

Kingfisher Bay Research Facility

Collaborative Opportunities
- Full access to USC facilities (differential conditions / rates do not apply)
- KBRV provide accommodation for approved researchers
- KBRV provide barge transfers for approved researchers
- USC facilities (vehicles, laboratories etc) charged at cost when in collaboration
- Joint courses, exchange of equipment ...
- Linkages with two loosely defined but growing associations driven by USC
    - Universities associated with globally protected areas
    - International Association for Regional Engagement

Examples of Environmental Research

- Backpacker Interpretation
- Landscape Ecology
- Humicrete Chemistry
- Ecological Footprint
- Ground Parrots
- Rare Species
- Dingo Prey

Dilli Village Educational Facility

- Environmental education field camp
- Accommodation for researchers and students
- General public access

Cabins, bunk houses and camping available 60 bunk beds, 60 campers, catering packages, dining room, hot showers.

On-site teaching facilities

- small dinning / teaching room, data projector, dvd player ...
- curriculum materials in preparation
- planned
  - internet cafe
  - teaching rooms (2005)

Bus tours organised

- lakes, dunes, rainforest, woodlands …..

Collaborative Opportunities

- Available for primary and secondary school students (Education Queensland)
- Range of education packages from self-guided to full ranger/teacher support
- Opportunities to meet with partner (sister) institutions
- Community meeting location

The Conduct of Research 2020