



eriss landscape projects
in the Alligator Rivers
Region – seminar
presented to the Kakadu
Board of Management

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June 2003

***eriss* landscape projects in the Alligator Rivers Region – seminar presented to the Kakadu Board of Management**

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Environmental Research Institute of the Supervising Scientist



Supervising Scientist

ERISS

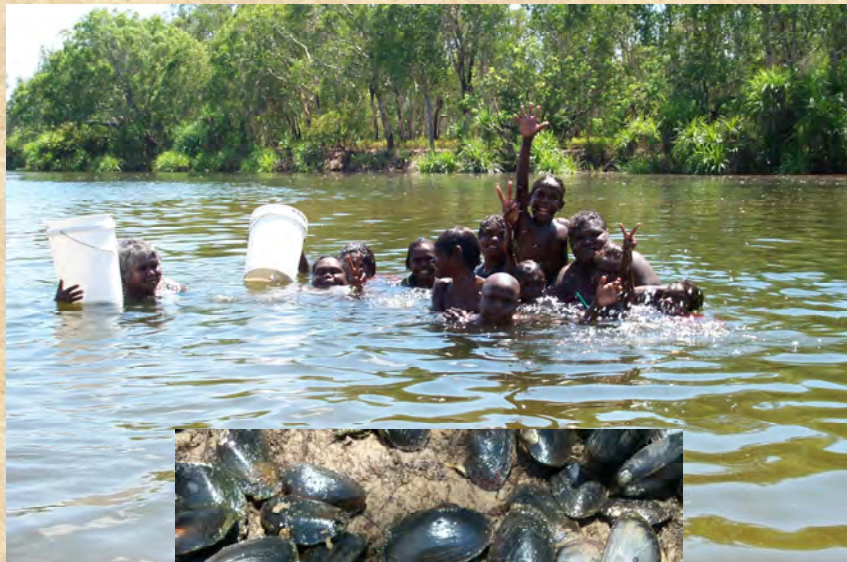
Landscape Projects in the Alligator Rivers Region



ERISS Work – Mostly Monitoring Water Quality in Magela Creek



Monitoring mussels & fish



New Landscape Work in the ARR

- **World Heritage Committee asked Independent Science Panel (ISP) to review the Supervising Scientist risk assessment of Jabiluka**
- **ISP agreed risks were small**
- **They recommended, however that ERISS develop a landscape program for Kakadu that:**
 - **separates mining & non-mining impacts on country**
 - **includes Traditional Land Owner views**
 - **helps conserve natural World Heritage values**
- **Talks with Parks, KRAC, ARRTC & other stakeholders (e.g. NLC, NTG etc).**
- **Now talk with Kakadu Board about landscape projects & how we can work together.**

ISP Landscape Project

Aims

1. To separate mining & non-mining impacts

**East Alligator
(Magela)**

**South Alligator
(Boggy Plain)**

Mine

No mine (control)

Infrastructure

None

Weeds

Weeds

Ferals

Ferals

Saltwater

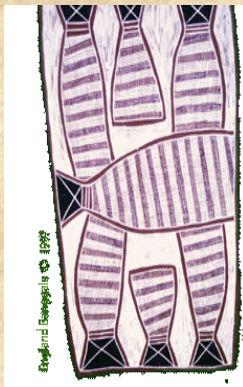
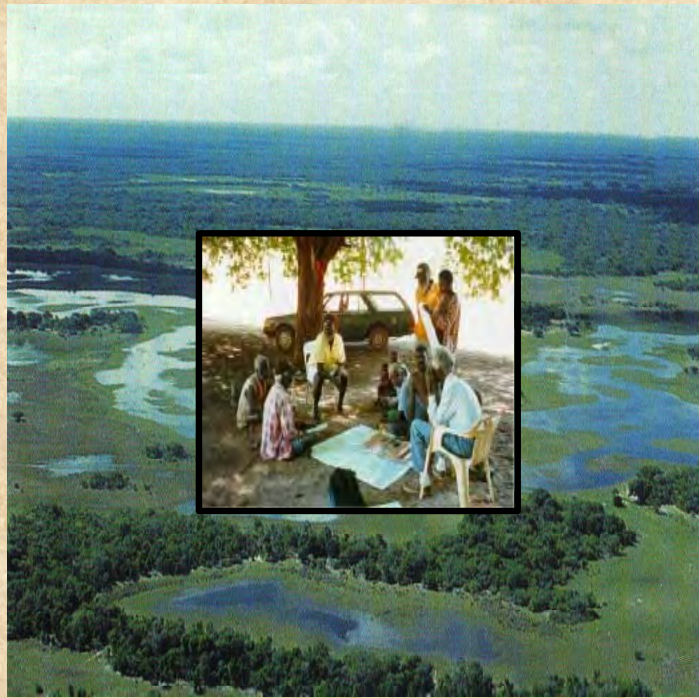
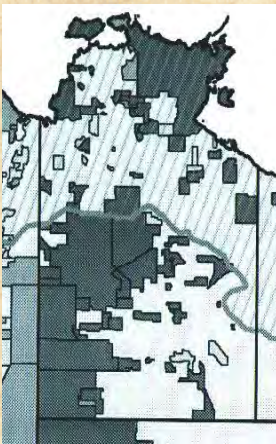
Saltwater

2. To contribute to monitoring of World Heritage values of Kakadu

Landscape Projects

- **Usually just means Balanda science
(plants, animals, rocks, water & air)**
- **But to have meaning in ARR**
 - **Include Bininj values & views**
 - **Using “Caring for Country” thinking**

Indigenous views of landscape management in the Northern Territory



~28% Population

~44% Land

~85% Coastline



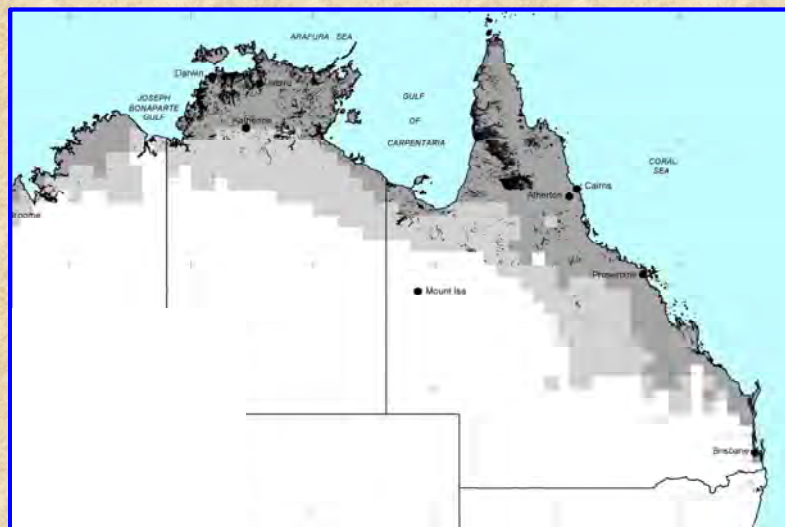
Some Landscape Projects

1. WEEDS
2. FERALS
3. WATERBIRDS
4. FIRE & BOGGY PLAIN
5. CARING FOR SEA COUNTRY
6. 10 OTHERS

WEEDS

Mimosa

**Biggest threat to tropical wetlands
in northern Australia**

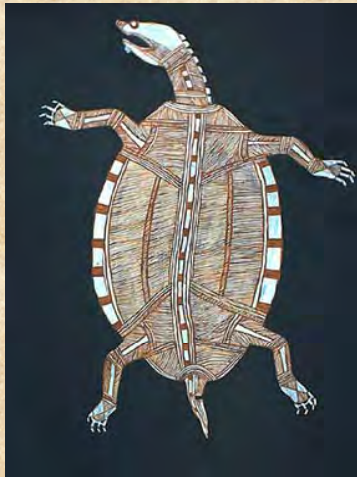


**But – Paragrass, Salvinia &
other weeds catching up**

MIMOSA REDUCES MAGPIE GOOSE NESTING HABITAT



MIMOSA & PARAGRASS DESTROYS OTHER BUSH TUCKER HARVESTS



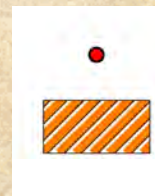
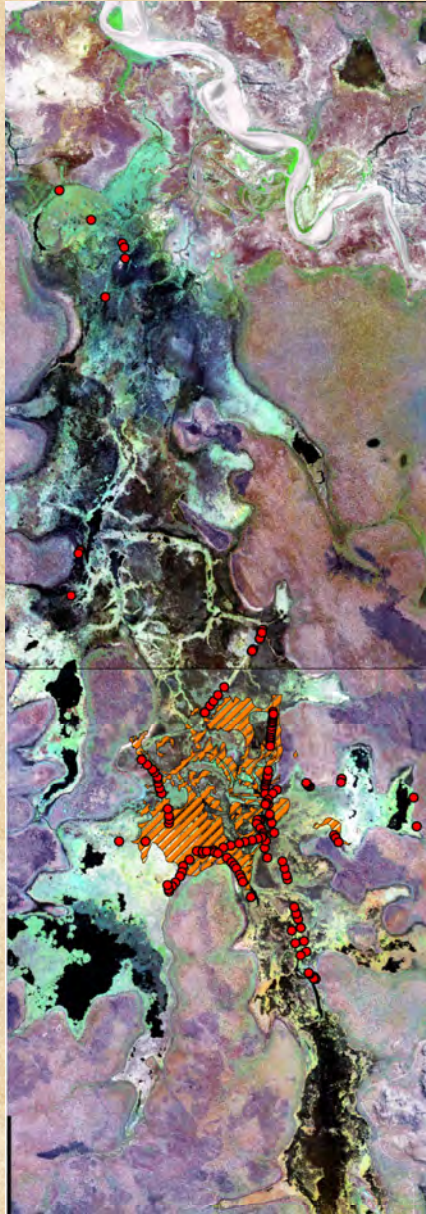
**Pig nose turtle (Lofty
Nadjamerrek, Oenpelli)**



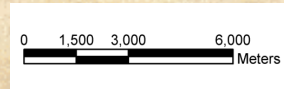
& ALSO POTENTIAL COMMERCIAL USE



Mapping Paragrass & other weeds on the Magela



New (2003)
Old (1991)



FERAL ANIMAL MANAGEMENT KAKADU



- How many & where (whose country & responsibility)?
- Which cultural resources (assets) are damaged?
- How do TOs view this “damage”?
- How do TOs value pigs & buffalo?
- How do we manage these different views?
- What are the “trade-offs”?
- Don’t forget the others. →



Boggy Plain (Nanjbagu) Fire Project



**Cultural resource management project
Peter Christo, Violet & Sandra – with
help from EA (Parks & Eriss)**

Boggy Plain Vegetation transects

Native *Hymenachne*



Eleocharis dulcis -Burnda



Saltwater Intrusion



For important freshwater wetlands like Boggy Plain we can map those places most likely to suffer from saltwater intrusion

Waterbirds

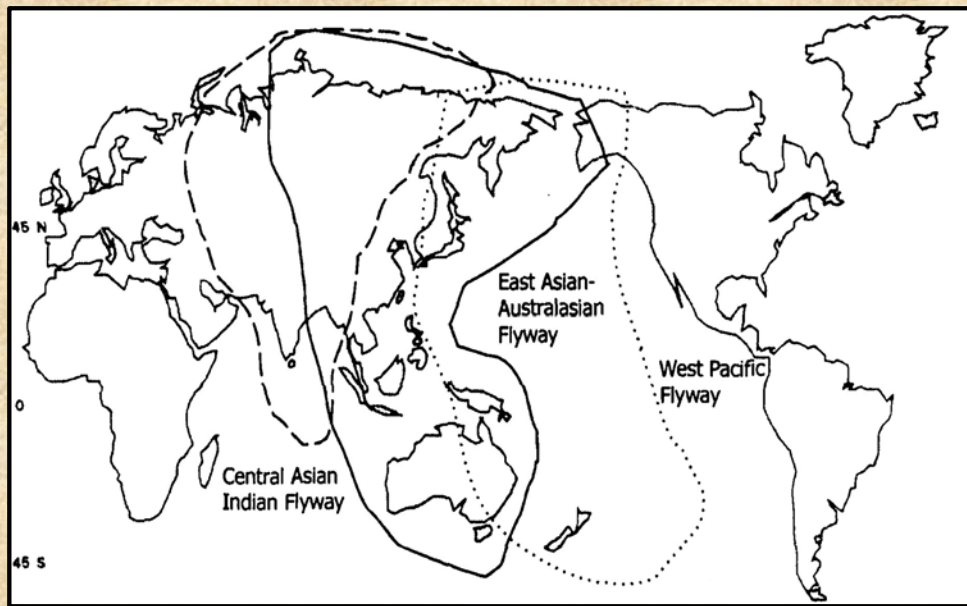
“Top End” Surveys (1983 – 1989)



**Showed Boggy Plain & Mamukala
wetlands had biggest *Eleocharis*
swamps in NT & also 85% of dry
season geese numbers**

But what has happened since 1989?

Migratory shorebirds found in Kakadu travel the world



Looking after Sea Country

- **Marine wildlife** highly valued by Indigenous people – dugongs, crocodiles & sea turtles



- **Coastal habitats** – seagrass, islands, mangroves, mudflats rivers & creeks



Are mangroves moving inland because of climate change (sea level rise)?



- **East Alligator 20 year study**
- **West Alligator study**

How can we work together on these Landscape Projects?

