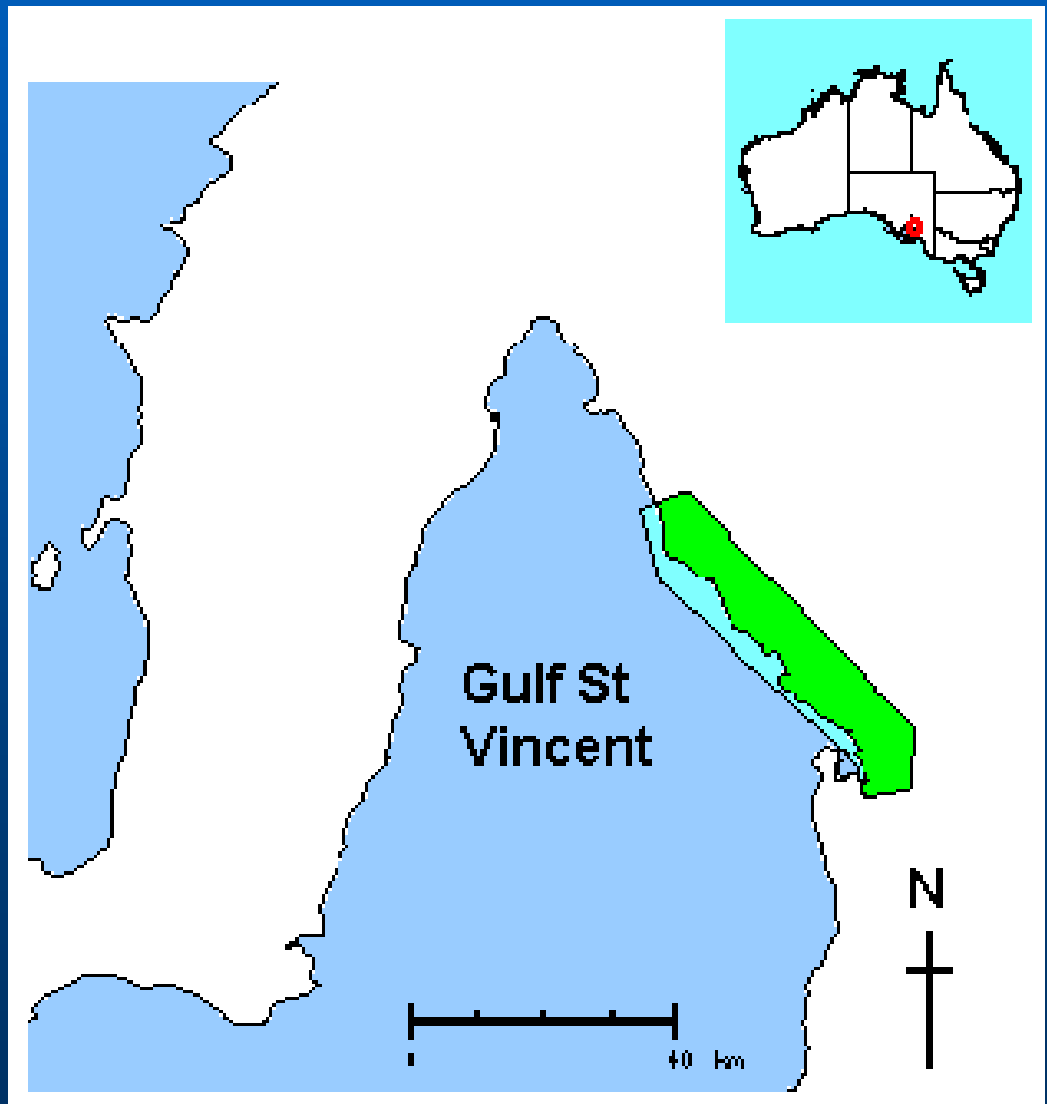


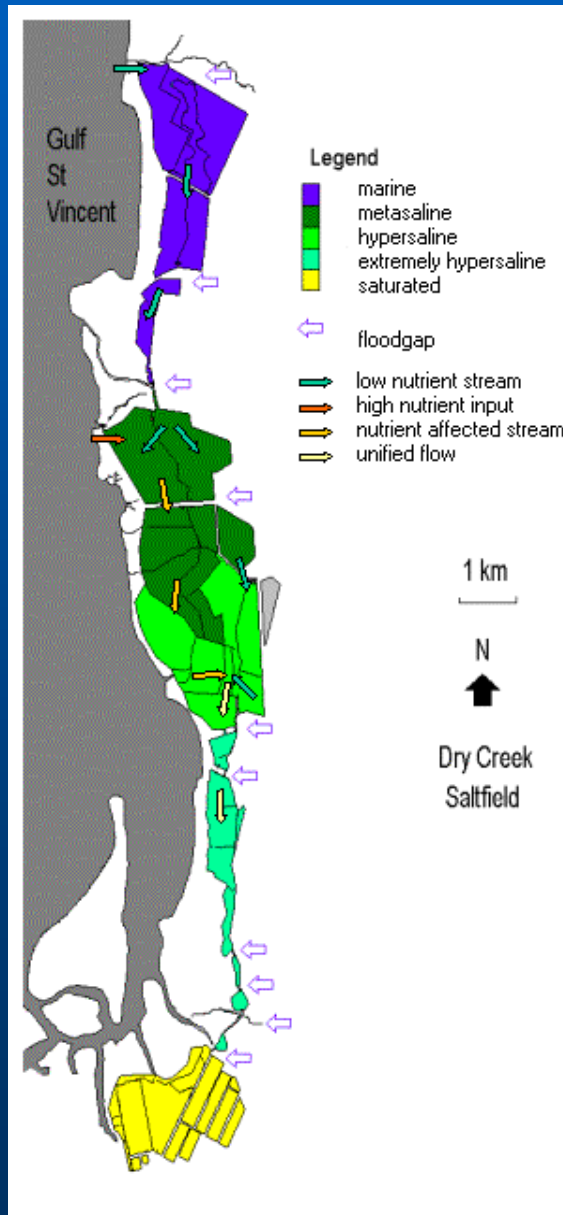
Benthic diatoms in the salinas of the Dry Creek Saltfields

Faith Cook and Peri Coleman*

Location of study area



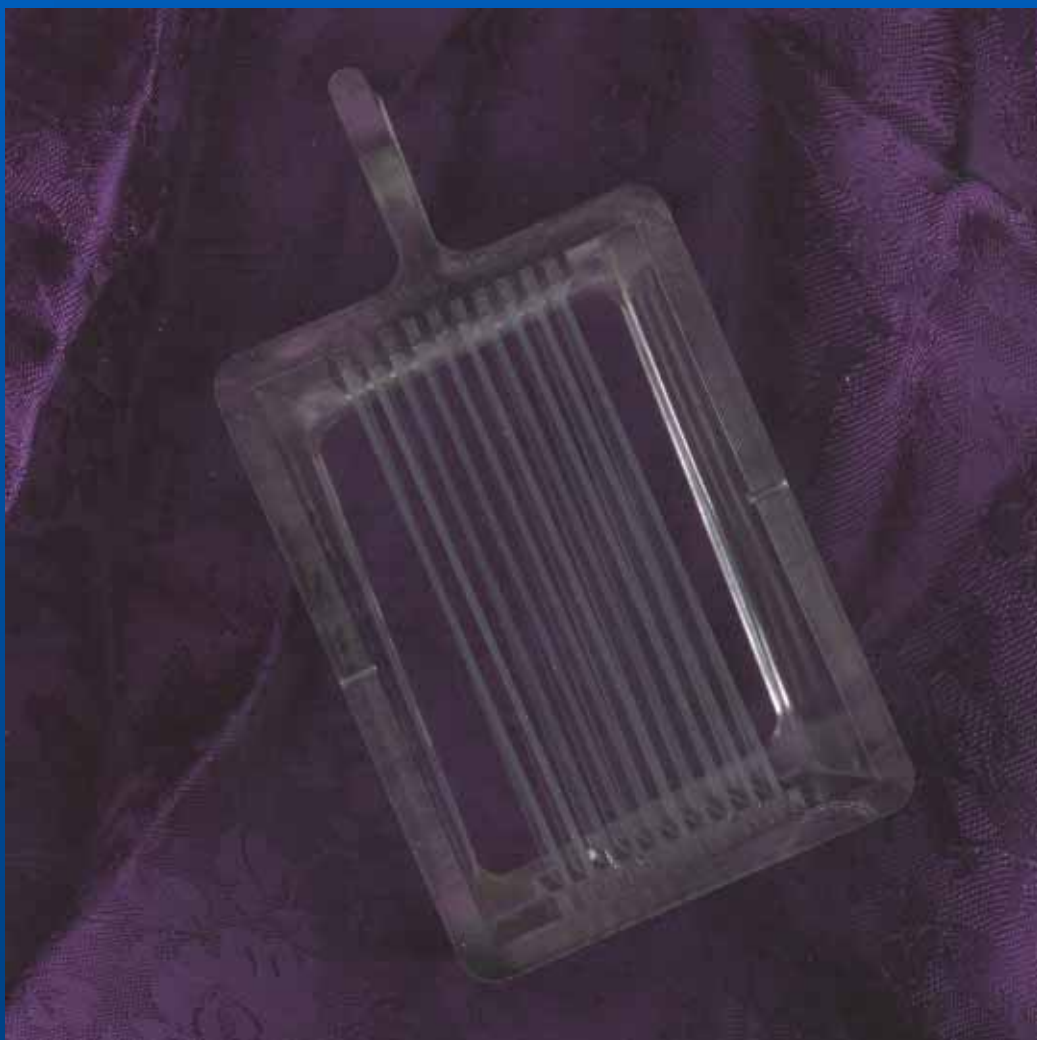
Brine flows through the salinas



Physico-chemical data

Location	SG	TDS (g/L)	Biomass (cells/mL)	TPO4 (mg/L)	TKN (mg/L)
Salt Creek input	1.028	40.85	36203	0.046	0.745
XE1	1.029	42.26	19475	0.059	0.650
Chapman Creek input	1.026	38.03	101311	0.526	1.659
XB3 (contains input from Chapman Ck and XD1)	1.045	64.57	324815	0.053	1.824
XB8A	1.084	119.89	725612	0.266	4.627
XC3 (the two streams are united)	1.074	105.38	44292	0.022	2.064
PA3	1.104	149.85	44092	0.048	3.959

Monitoring benthic diatoms



Diatom assemblages

- 69 species were recorded
- 16 species occurred only in oligotrophic waters with <70 mg/L TDS
- 20 species occurred only in eutrophic waters with <70 mg/L TDS
- 8 species were restricted to the hypersaline salinas

Future work

- **Collection of benthic diatoms over several seasons**
- **Study of ecological preferences and occurrence patterns to find diatoms that may be useful as indicator species**
- **Statistical analysis of assemblages to develop an index of trophic status**

FOR MORE INFO...

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