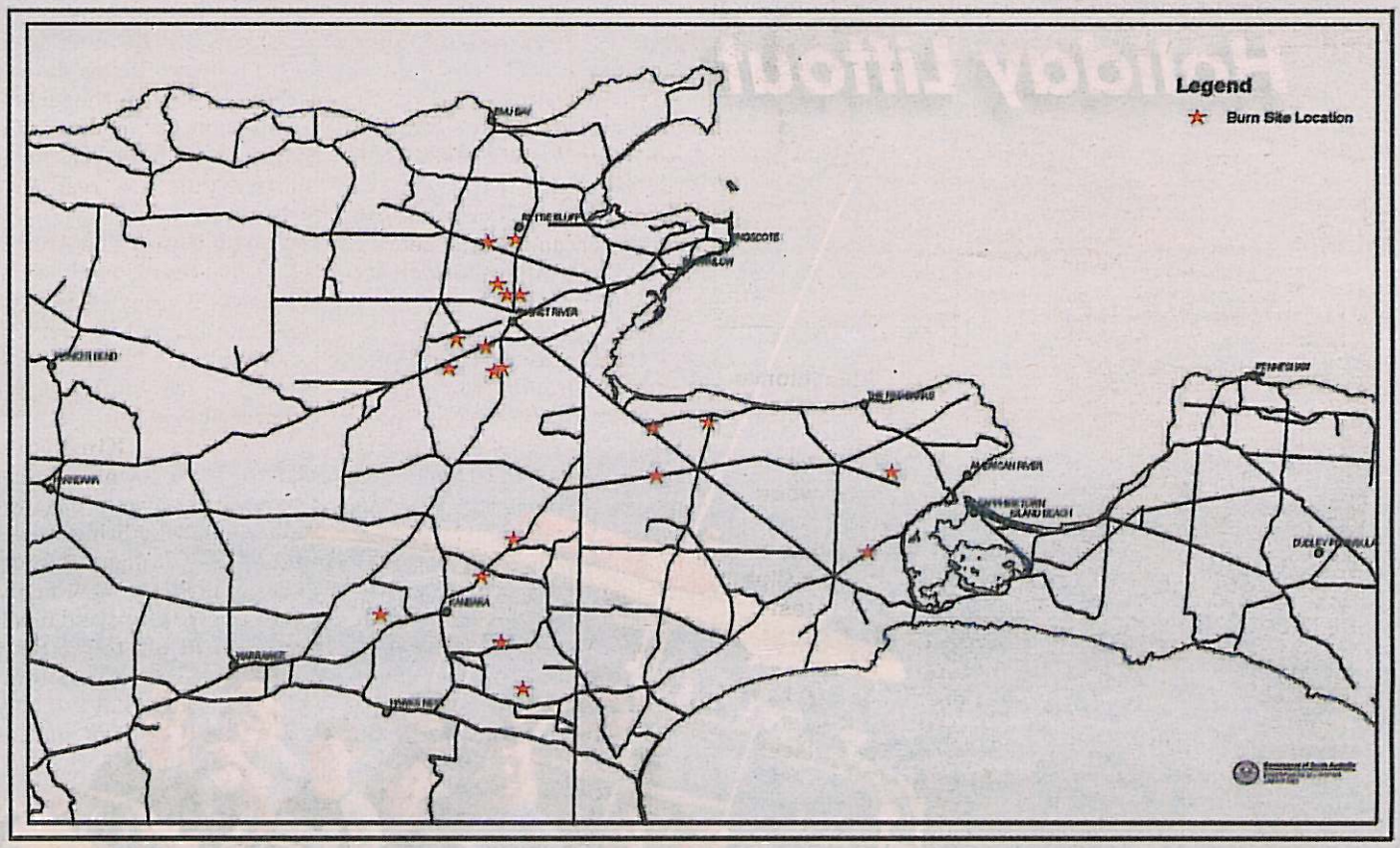
Giving nature a hand using power of fire



In the Australian environment, our native vegetation needs fire to renew and rejuvenate. Endangered species can rely on fire's periodic effects and the timing can be critical.

The Kangaroo Island Eastern Plains Fire Trial, funded by the KI Natural Resources Management Board and delivered by the Department for Environment and Heritage (DEH), aims to develop a better understanding of the role of fire in maintaining ecosystem diversity and health by testing five management questions:

Does burning small areas of long unburned mallee promote significant plant species regeneration?

Do vegetation patches of different shapes and connectivity, respond differently to burn events?

Is there a significant difference between results from spring and autumn burns?

Does fire intensity result in a significant difference in regeneration response?

Does hydroaxing the overstorey significantly change the regeneration response?

The trial study area was cleared extensively for agriculture in the 1950 and 1960s. Less than 16% (15,198 ha) of the original vegetation remains and of this area, roughly 4064 ha is narrow-leaf mallee (*Eucalyptus cneorifolia*) community.

This vegetation type, virtually restricted to eastern Kangaroo Island, supports a range of unique plant species, seven of which are nationally threatened. Without fire in the last 50 years, many of these communities are senescing.

Evidence suggests that carefully planned burning in long unburned habitat is an effective in encouraging the regeneration of many fire-dependent plant species.

The Eastern Plains Fire Trial will burn small experimental sites (< 5 ha) in autumn and spring 2009, and medium-sized and large sites in the following two years.

Community support for the project has been strong with 152 sites submitted for the trial. Of these, 51 small sites have been selected for the first phase. The rest will be considered for future phases.

The CFS, DEH, and KI Council as well as landholders will join as a team for the burns. Changes in flora and fauna communities will be measured at a series of long-term sites monitored by DEH and students from Flinders University and the Australian National University.

Dave Taylor, DEH Threatened Plant Species Officer, anticipates improved bushland condition at each site and better knowledge of the ecology of eastern KI plant communities.

The trial should also improve fire-management practices and strengthen partnerships among land managers to benefit the community and environment of Kangaroo Island.

Fishing, quizzing

Food, Wine & Art Guide