

Please do not hesitate to call at any time on either number including weekends, etc.

Biological Survey Of The Carnarvon Basin

Allan Burbidge

The WA Department of Conservation and Land Management and Western Australian Museum have recently commenced a joint biological survey of the southern Carnarvon Basin (Lake MacLeod to just north of the Murchison River). Other specialists from Universities and elsewhere will be assisting in various aspects of the survey.

The survey is part of a long-term program to establish a system of biogeographic benchmark quadrats across Western Australia.

The program commenced in 1977 and, so far, has covered the Nullarbor, Eastern Goldfields, parts of the Kimberley, Southern Forests and South Coast regions.

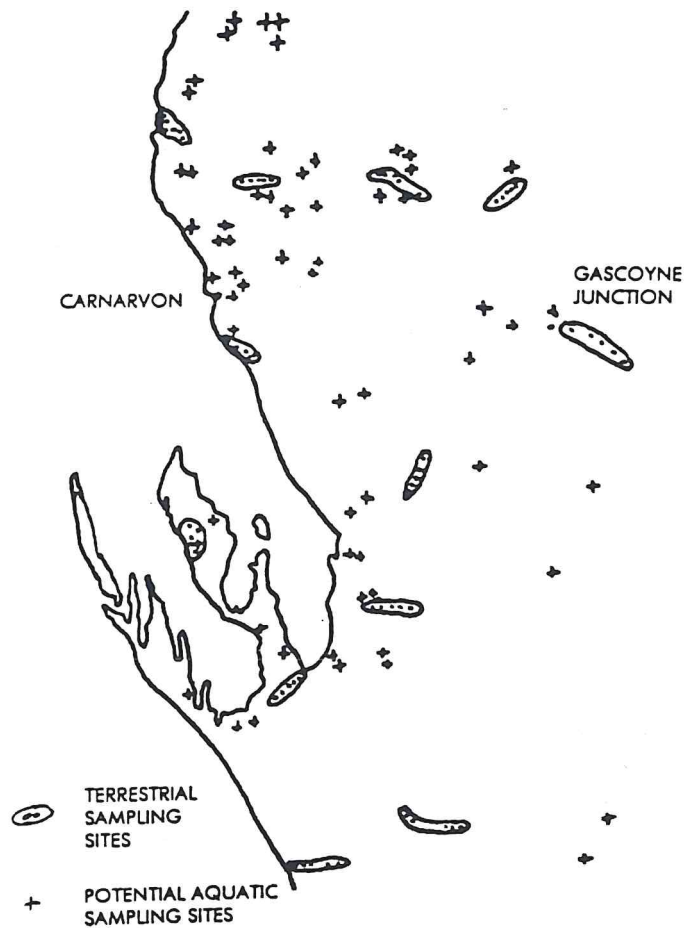
The sampling is sparse (e.g. 80 quadrats across the Nullarbor, 150 across the Eastern Goldfields and 61 terrestrial quadrats in the Carnarvon Basin), but the quadrats cover the region's geographic extent and major surface types, and the sampling covers a wide array of life-forms and is exhaustive within the quadrats.

In the case of the Carnarvon Basin, we will also be sampling aquatic animals in about 50 water-bodies throughout the basin.

The purpose is to:

- (1) Describe and understand the geographic patterns of plants and animals across the basin (the animal groups include the small mammals, birds, reptiles, spiders, land snails, scorpions, cockroaches and aquatic animals).
- (2) Provide a long-term basis for assessing changes in the biota at the regional scale, rather than the effect of localised events. For this reason, the quadrats are precisely located so that they can be re-sampled at 30 to 50 year intervals.

LOCATION OF THE C.A.L.M. BIOLOGICAL SAMPLING SITES



Biologists participating in the survey will be visiting the Carnarvon Basin during the next twelve months to make lists of the plants and animals at all 61 terrestrial quadrats and approximately 50 aquatic sites selected in the Carnarvon Basin (the locations of the relevant quadrats are shown on the attached map).

This field work will be completed during visits in August 1994, September-October 1994 and April 1995.

In preparation for this research, a team of four biologists dug 21 pit traps (each 30 cm in diameter and 50 cm deep) on each quadrat during May 1994. Caps were placed on each trap so that the traps would not catch animals until we come back during the sampling sessions in spring and autumn. Each quadrat (sampling site) covers about 16 ha.

All station owners/managers have been contacted prior to quadrats being established, and this liaison will be ongoing. On completion of the survey, station owners/managers who manage land where there are any of our research sites will be informed of the results obtained on those sites. We also intend to make the results and conclusions available to all land managers in the Carnarvon Basin.

**Tamarisk Headache for Carnarvon
LCD**

John Stretch

The hardy tamarisk tree, though never a favourite with enthusiastic gardeners, has been a reliable choice for farm and station windbreaks and as a stockyard shade tree for many years.