

Australian Archaeology



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Full Citation Details:

Cane, S. Stockton, J. & Vallance, A. 1979. A note on the diet of the Tasmanian Aborigines. 'Australian Archaeology', no.9, 77-81.

A NOTE ON THE DIET OF THE TASMANIAN ABORIGINES

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The Tasmanian Aboriginal diet was drawn from marine and non-marine environments, in which food resources varied according to habitat. Alpine and rain forest environments provided a limited supply of plant food, whereas the wet and dry sclerophyll forests provided an abundant supply of plant and animal foods. The coastal zones, despite a deceptively barren appearance, supplied a consistently rich plant and marsupial food resource that was supplemented by large shellfish grounds and a seasonal abundance of birds and certain mammals.

There were many kinds of plants eaten by the Tasmanian Aborigines. However, many of these were either seasonal, as in the case of plant seeds and fruits, restricted in their location, as for example in specialised alpine communities, or sparsely represented as in the case of the orchid family. Ethnographic records suggest that these kinds of plants were a secondary food resource. On the other hand there are many environments which support an abundantly diverse range of plant foods. There are species, as in the case of the man fern *Dicksonia antarctica*, which although localised are presented in large numbers, and there are plant species such as the bracken fern *Pteridium esculentum* which are consistently well represented throughout the island. In such cases the botanical significance of the species and their regular occurrence within our ethnographic records suggests these kinds of plants were a primary food resource for the Tasmanian Aborigines. A list of the vegetable foods eaten by the Tasmanian Aborigines is tabled below.

List 1: List of foods thought to comprise the Tasmanian Aboriginal diet

Primary food resource	References
<i>Pteridium esculentum</i> (Bracken fern)	Hiatt, Mollison, Jones
<i>Xanthorrhoea australis</i> (Grasstree)	Hiatt, Mollison, Jones
<i>Dicksonia antarctica</i> (Manfern)	Hiatt, Mollison, Jones
<i>Cyathea australis</i> (Rough tree fern)	Hiatt
<i>Carpobrotus rossii</i> (Pigface)	Hiatt, Mollison, Jones
<i>Triglochin procera</i> (Arrow grass)	Jones
<i>Gastrodia sesamoides</i> (Native potato orchid)	Hiatt, Jones
Orchidacea family in general	Hiatt, Mollison, Jones
<i>Mylitta australis</i> (Blackman's bread)	Hiatt, Mollison
<i>Fucus palmatus</i> (Seawrack)	Jones
<i>Durvillea potatorum</i>	Hiatt, Mollison

Secondary food resources

(a) Fruits

<i>Billardiera longiflora</i> (Climbing blue berry)	Jones
<i>Rubus parvifolius</i> (Native raspberry)	Jones
<i>Coprosma hirtella</i> (Coffee berry)	Jones
<i>Coprosma quadrifida</i> (Native currant)	Mollison, Curtis
<i>Astroloma humifusum</i> (Native cranberry)	Jones
<i>Sambucus gaudichaudiana</i> (Native elder)	Jones
<i>Gaultheria hispida</i> (Snow berry)	Mollison
<i>Cyathodes juniperina</i>	Jones
<i>Solanum laciniatum</i> (Kangaroo apple)	Hiatt, Mollison, Jones
<i>Persoonia juniperina</i> (Prickly geebung)	Jones
<i>Leucopogon</i> spp.	Jones
<i>Leptomeria drupacea</i>	Jones
<i>Carpobrotus rossii</i> (Pigface fruit)	Hiatt, Mollison, Jones
<i>Cenarrhenes nitida</i> (Native plum)	Jones, Curtis
<i>Rhagodia baccata</i> (Coastal saltbush)	Vallance
<i>Acacia sophorae</i> (Wattle)	Hiatt, Jones
<i>Acacia stricta</i> (Wattle)	Jones
<i>Acacia botrycephala</i> (Wattle)	Jones
<i>Acacia melanoxylon</i> (Wattle)	Jones
<i>Casuarina</i> spp. (Shea-oak)	Mollison

(b) Gums

<i>Eucalyptus viminalis</i> (Manna gum)	Jones
<i>Eucalyptus gunnii</i> (Cider gum)	Mollison
<i>Acacia melanoxylon</i> (Blackwood)	Jones

(c) Roots

<i>Daucus glochidiatus</i>	Jones
<i>Geranium solanderi</i> (Native geranium)	Hiatt, Jones

(d) Leaves

<i>Drimys lanceolata</i> (Mountain pepper)	Robinson
<i>Oxalis corniculata</i> (Wood or clover sorrel)	
<i>Atriplex billardieri</i> (Salt bush)	Jones
<i>Tetragonia implexicoma</i> (New Zealand spinach)	Jones
<i>Sonchus megalocarpus</i>	Jones
<i>Cardamine heterophylla</i> (Cress)	Jones
<i>Cardamine intermedia</i>	Jones
<i>Calandrinia calypttrata</i>	Jones
<i>Lomandra longifolia</i> (Mat rush)	Jones
<i>Rhagodia baccata</i> (Coastal saltbush)	Vallance

(e) Flowers

<i>Calytrix tetragona</i>	Jones
<i>Banksia marginata</i> (Honeysuckle)	Jones
<i>Casuarina</i> spp.	Mollison
<i>Asterotrichion discolor</i> (Currajong)	Curtis

References

In the past some prehistorians believed the Tasmanian Aborigines suffered from a carbohydrate imbalance (Noetling 1910). To test this, portions of commonly available plants were sent to the Tasmanian Government Analysis Department for carbohydrate analysis. Although the full results of this analysis are shown in Table 1 we are primarily interested in the carbohydrate content of each species. The energy value of these species is documented in calorific terms and that one calorie is the amount of energy required to heat one cubic centimetre of water. There are 1000 of these calories in a kilocalorie.

The results given in Table 1 may be compared with those for five staple vegetable foods available to western man. These are shown in Table 2. We find that the Tasmanian grass tree (41.3%) holds less carbohydrate than bread (49.9%) whereas the bracken fern contains more (22.7%) carbohydrate than potatoes (19.1%). Likewise the Tasmanian man fern (12.3%), coastal salt bush (10.3%) and pig face (4.6%) contain a higher percentage of carbohydrate than carrots (8.6%), pumpkin (7.1%) and spinach (3.7%). For the total carbohydrate contribution of these western foods we find that for the five species - or 500 grams tested, there is a total of 88.4 grams of carbohydrate whereas for the same gross gram weight in the native foods tested there were 91.2 grams of carbohydrate.

From these results it seems that individual plant species available to the Aborigines were as well stocked with carbohydrate as the vegetable foods available in the western diet. This fact, coupled with the extensive distribution of each species tested would support a conclusion that the floral component of the Tasmanian environment was not deficient in carbohydrate and hence the diet of the Tasmanian Aborigines did not suffer from a carbohydrate imbalance.

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Table 1: Composition of foods per 100 grams edible portion

Specimen	Common name	Part eaten	Protein g	Fat g	Carbo- hydrate g	Kilo- calories Kcal
<i>Dicksonia antarctica</i>	Man fern	Core	1.6	0.6	12.3	61
<i>Pteridium esculentum</i>	Bracken fern	Root	1.3	0.4	22.7	99.6
<i>Xanthorrhoea australis</i>	Grasstree	Core	3.5	0.3	41.3	181.5
<i>Carpobrotus rossii</i>	Pigface	Leaves	0.8	0.3	4.6	24.5
<i>Rhagodia baccata</i>	Coastal saltbush	Leaves	3.2	0.4	10.3	57.4

Table 2: Composition of foods per 100 grams edible portion

Foods	Part eaten	Protein g	Fat g	Carbo- hydrate g	Kilo- calories Kcal
Potato	Root	2.0	0.1	19.1	80
Bread (white)	-	7.8	1.5	49.9	243
Pumpkin	Fruit	1.0	0.2	7.1	31
Spinach	Leaves	2.5	0.3	3.7	23
Carrots	Root	0.9	0.2	8.6	36

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