To kill a mutton bird: the archaeology of birding in the Outer Furneaux Islands

Introduction

Birding, as the killing and processing of mutton birds is known, is an important economic activity in the Furneaux Islands in Bass Strait. This paper looks at the archaeological remains of birding sites in the Furneaux Islands based on fieldwork undertaken as part of a broader survey of post-contact archaeological sites in the Outer Furneaux Islands in 1990 and 1991. Since undertaking this work Iranay Skira has completed a doctoral thesis on birding (1995) and published several papers (1997a; 1997b) and that body of work must be seen as the definitive study on the history of the mutton bird industry. This paper, however, takes a look at the archaeological manifestations of that history and thus can be seen as an industrial archaeological study that complements rather than duplicates Skira’s historical work.

Ecological background

The mutton bird, or short-tailed shearwater (Puffinus tenuirostris), is a circum-Pacific migrant spending the northern summer in the region of the Aleutian Islands. The mutton birds appear at their southern breeding colonies in the third week of September, laying eggs between 19 November and 2 December. The chicks hatch from mid-January and remain in their burrows for about 94 days, reaching their maximum weight (around 800 grams) in early April. The birds leave the Furneaux colonies in early April, thus birding season occurs before the mutton birds leave for their migration.

Mutton bird colonies or rookeries are found on the Tasmanian and mainland Australian coasts and off-shore islands as well as in the islands of Bass Strait. The birds live in below-ground burrows along with Fairy Penguins and snakes. Collecting young mutton birds requires some courage as there are three varieties of animal life likely to be in the burrow: a mutton bird, a penguin or a highly deadly snake. The Bass Strait islands are notable for Tiger Snakes which feed on the mutton birds and are renowned for their aggressive behaviour.

Rookeries are typically established in aeolian sands (ideal burrowing material). The vegetation associated with rookeries has been analyzed by Brown et al (1993) who note the effects of mutton bird guano and the redistribution of organic matter deep into the soil profile through the agency of burrowing. This creates typical rookery vegetation patterns and features, such as extensive bare areas and colonies of exotic plants including thistles and boxthorn thickets.

Historical background

Intensive exploitation of the mutton bird appears to have only occurred in the post-contact era, despite the accessibility of mutton bird rookeries to Tasmanian and mainland Aboriginal people. As the sealers became more permanent residents (between 1805 and 1820) on the Bass Strait islands (which the Furneaux Group are a part of) it seems that mutton bird exploitation began to rise.
complementing sealing as a cash crop. Accounts of birding mention the killing of birds for their feathers, oil, fat and flesh as well as for the sale of their eggs. From the 1850s a threat began to emerge to the sealer/islander birding industry: the alienation of the islands containing the bird rookeries. This process was aided by the *Waste Lands Amendment Act* (1861) which allowed the leasing of islands for up to fourteen years. Alienation not only deprived the islanders of unrestricted access to the bird rookeries but the sheep farming that accompanied the settling destroyed the mutton-bird rookeries. The critical point, however, was that the owners controlled access. This put the islanders at an economic disadvantage and in a subordinate position to the settlers, who owned or leased rookeries, and to the Tasmanian based merchants who had the capital to purchase rights to birds, to employ workers and to sell birds. The various clerical visitors to the islands documented the ongoing tensions.

In 1908 the Tasmanian Police Commissioner, J.E.C. Lord, was appointed to enquire into the state of the 'half-castes' on the Furneaux islands, inevitably this involved the mutton bird industry. Lord made a series of recommendations designed to protect the mutton bird resource. He recommended that grazing on rookeries be prohibited and that the grazing lease for Chappell Island be cancelled. He also recommended that the freehold land on Chappell, Babel and Little Green islands be resumed. He suggested limitations and changes to licences, starting the season four days later and prohibiting birding after dark. Another area of concern was the need to inspect the quality of dressing, packing and curing to improve the quality of the birds put onto the market.

Lord's inquiry marked the beginning of greater governmental involvement with the mutton bird industry through the Flora and Fauna Board and the Health Department. The Flora and Fauna board concerned itself with the bird rookeries while the Health Department concerned itself with the quality of the processing sheds.

Skira, using official records, has graphed the total number of sheds in operation from 1924 to 1988. The graph shows a trend of increasing shed numbers until the early 1940s, followed by a gradual decline. Patsy Adam-Smith spent several years working on the small coastal ships that operated around the Tasmanian coast and around the Furneaux. In the two books *Moonbird People* and *There was a Ship* (combined in a 1983 edition as *There was a Ship*) Adam-Smith describes and illustrates the birding industry as it was in the 1950s. The focus of her descriptions was birding on Big Dog Island and Babel Island and it is by far the most readable of all the accounts of birding.

In 1991 when this survey was undertaken, there were seven sheds operating on Big Dog Island. The Green's shed on Babel Island was to operate in 1990 and in 1991 but remained unused in both years. The main problem facing the industry seems to be the nature of the work, which is difficult, the ever-present snake threat and the isolation.
Birding

The detail of contemporary birding was described to the author by Iranay Skira on a visit to a site known as Rhodes' (Furn-54) in February 1991.

The process of birding, in the first instance, involves the collection of young birds from the rookeries. The birds are killed on the rookeries and carried into the shed on a piece of wood, pointed at each end, called a spit. The spits are placed on a 'rest', basically an upright frame just outside the shed.

The oil is then squeezed out of each bird into oil drums. This is achieved by squeezing along the length of the bird towards the neck. The gut contents and oil fall into the drum and the gut contents are floated off to leave the oil.

After the oil removal the bird is thrown through a small hatch in the side of the processing shed; this hatch, covered in hessian to keep out the flies, is the entrance to the plucking room. The bird is roughly plucked, a process taking about half a minute or so. Needless to say, anyone working in the plucking room ends up covered in feathers. After plucking, the bird is passed through another hessian-covered hatch to the scalding room.

The scalding room contains a drum of continuously boiling water in which the birds are scalded. They are then rubbed down to remove the remaining feathers and finally cleaned by brushing. After this treatment the birds are passed through a hessian lined hatch to the cooling room. Here the birds are left to cool before being gutted and then subjected to a dissection process in which the head, feet and wings are removed.

Figure 1 A typical processing shed: Rhodes' shed on Big Dog Island.
Birds can be skinned, which removes excess fat and apparently improves the market value. Otherwise they are either salted or frozen for sale.

The processing shed has a simple rectangular plan and is divided into three rooms where each function in the process occurs (Figure 1). These are linked by hatches. The hatches are screened by movable, hessian fly-wire screens. The access into the cool room uses a complex system of double doors that is designed to trap flies: keeping flies out of the shed is considered a priority.

An additional process, not now used, was the rendering down of the guts to extract the fat and oil. This was done in a try works consisting of an iron pot, dug in the side of a dune, with a fire space underneath. One of these abandoned try works consisted of two try pots: specialized iron pots used for trying-out whales (Figure 2). This feature was identified as a 'sealing site' in There was a Ship but clearly has nothing to do with either sealing or whaling.

**Archaeology of birding**

The archaeological survey identified a settlement pattern, which I have termed a 'birding stand'. A birding stand consists of the processing shed, a shed with accommodation and kitchen facilities, other accommodation units (basically sheds with bunks), a toilet, and various other items such as mutton bird middens, showers, machinery sheds, generators and the like. Associated with each stand is the mutton bird rookery and boating facilities. A typical stand is shown in Figure 3.
The archaeological survey recorded 28 birding stands, on five islands. Seven of these sites were in such poor condition that it was impossible to locate individual features. Nineteen processing sheds, thirteen kitchen/accommodation units, fifteen sites with accommodation units and four sites with remains of try works were recorded.

The detailed survey-records of occupied sheds are not as complete as those not in use as it was felt to be too intrusive to record currently utilised living areas in detail.

**Birding sheds**

All the sites, with the exception of Furn-91 on Babel Island, were located on the coastline, basically on the interface between rookeries and the coast. Presumably this was to make loading of oil and birds easier, although as Adam-Smith's (1983) account of such activities on Babel Island shows, it was difficult to load and unload boats on the beach due to the surf.

Most of the birding sheds conformed to a simple, three-roomed plan with some interesting variations. Furn-35 is only two roomed, with plucking and scalding activities undertaken in the one room. Furn-77 and Furn-78 on Babel Island appear to have extra rooms. Furn-77 is a relatively large shed incorporating several extra rooms whose functions are unclear. Furn-78 is interesting as it is an adaptation of the ‘Nissan’ hut, a prefabricated building usually used for military purposes.
The construction features of birding sheds can be divided into two groups. The majority of sheds are built of cement sheeting nailed onto a wooden frame that rests on a concrete slab. Most openings are fly-proofed using wire mesh or hessian. The roof is flat with a low-pitched, boxed gabled roof made from corrugated galvanised iron.

The second construction type uses vertical weather-boards in a manner reminiscent of a timber paling fence (Figure 4). These are nailed onto a wooden frame that rests on a concrete floor. The building has a low-pitched, corrugated galvanised iron roof. It can be seen that the two construction types differ only in the manner of wall cladding.

Whether these two shed types were contemporary is an interesting question. This can be addressed by examining photographs of birding sites in the Furneaux, taken from the 1890s. None of the buildings in the earlier photos look remotely like those presently existing. The photos show buildings that are constructed from horizontal weatherboards with pitched, gable ended roofs which are made from either thatch or galvanised iron.

Photos of birding stands on Chappell Island and on Big Dog Island taken in 1943 and 1945 show the old form of buildings. Photos published in There was a Ship which date to the 1950s show a mixture of flat-roofed and pitched-roofed buildings. By 1975, photos published of sites on Big Dog Island show a mixture of both types. Interestingly, many of the buildings constructed in the area of soldier settlement on Flinders Island have timber-paling walls suggesting that use of this form of construction dates to the post-war period.
One of the major influences on the nature of the birding shed would have been the attitude of the Fauna Board and the Health Department. Representatives of both agencies inspected the birding stands before and during each season, from the late 1920s onwards, to ensure that the quality of the birds and the health of the birders did not deteriorate. 11 No doubt more detailed research of the government archives could yield information on improvements to the birding process that would have been reflected in shed design.

Based on building material it seems unlikely that any of the sheds still standing date to before the mid-1950s. But this is not to say that earlier sheds did not exist at the same site. The process of gradually ‘modernising’ the sheds may have resulted in the gradual replacement of all the old fabric with new material. The site may have been that of the original location, but the fabric remaining for the archaeologist to investigate is relatively modern.

**Kitchen/accommodation units**

These buildings contain a kitchen and eating area as well as rooms for sleeping. The plans of these buildings vary greatly as does the construction material. They are made from timber frames, with either wood or cement sheeting. Some have pitched roofs. As discussed earlier some buildings appear to be converted from birding sheds. Many also had wood-fuel stoves. Traditionally they were ‘carpeted’ daily with fresh cut grass.

**Accommodation units**

These are basic shed forms with either cement sheeting or timber nailed onto timber framing. There is little regularity in their plan.

On Babel Island, however, there seems to be a prefabricated accommodation shed form constructed with corrugated galvanised iron. Furn-77 (Feature 1) incorporates one of these sheds into the larger structure. Furn-78 (Feature 4) is still standing, while Furn-83 (Feature 2) has collapsed.

**Associated features**

Four birding stands (Furn-48 and Furn-54 on Big Dog Island, and Furn-77 and Furn-78 on Babel Island) were associated with some form of machinery. All these were Ferguson tractors in various states of preservation. Furn-77 also had the remains of a ‘Dingo’ scout car. Dingo scout cars were an Australian type, widely distributed to army regiments from 1942; they were phased out from 1954.13 The tractors and the Scout Car were used to increase the speed of bird transport to the sheds.

Remains of try works are to be found at Furn-35 and Furn-38 on Little Dog Island, Furn-55 on Big Dog Island and at Furn-60 on Little Green Island. All these sites are currently not working and are virtual ruins. Skira claims that trying finished in the 1940s.
Midden deposits of bird bone were noted at Fum-77 and at Fum-83 on Babel Island. Presumably the areas around most birding sites should contain substantial deposits of bird bone, particularly the head, wings and feet which were removed as part of processing the birds. At the end of each season, clothing was discarded as it was too saturated with mutton bird remains to ever be properly cleaned; consequently there are also deposits of clothing and rubbish around the sites. All these seemed to be of a recent origin, however, there may well be earlier deposits that have as yet been unobserved.

Cairns associated with rookeries were identified as rookery markers on Little Dog Island (Fum-37 and Fum-39) and on Little Green Island (Fum-59). It is likely that there are many more subtle place-markers in the landscape as there must have been defined boundaries within the rookeries to establish which stand ‘owned’ which part of a rookery.

The main birding sites at Babel Island were also accompanied by complementary features, such as the site of Jackson’s store (Fum-79), the loading ramp at ‘the Gulch’ (Fum-80) and the well (Fum-81). These features seem to be unique to Babel Island and are probably related to the islands geography, especially ‘the Gulch’ which provides a safe mooring for the ketches that served the birding industry, so that they could load and unload directly to the land.

Figure 3, a photograph taken on Big dog Island, is a good illustration of a birding stand. The stand is located in a fold of ground by the sea. The buildings are clustered together, both for convenience and to form shelter. Faint tracks link all the birding stands but it is only on Babel Island that there is a vehicular track linking all the stands. Figure 3 also allows a sense of the rookeries and their almost featureless nature.

Figure 5 An abandoned birding stand.
Conclusion

The actual processing of a mutton bird seems little changed from the detailed descriptions of birding in the nineteenth century. The combination of modern building material and increasing regulation has, however, changed the nature of the buildings associated with birding. The industry seems to be in slow decline as potential income is not all that good and the actual birding is unpleasant and dangerous. It seems the end is near for the 'saline sea chicken industry'.

Without the annual birding season maintenance, the birding stands are gradually falling apart. The coastal environment is a tough one. Here nature reasserts itself by slowly wearing the buildings out through the incessant wind and rain. Ironically, the birds themselves undermine the foundations and concrete slabs on birding sites, with their burrows causing the foundations of the birding stands to sag and collapse (Figure Five). In this tough environment little survives for the archaeologist, and conservation seems impractical.

Thus, on the coasts of the Furneaux Islands, sit what remains of the birding industry, like the clipper Farsund on Vansittard Shoal, they are relics of a lifestyle now slowly returning to nature. Yet annually the birds take to the wind, dance on the sea and fly in low clouds over the islands at dusk.

references
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Montgomery, H.H. 'A Trip to the Furneaux Islands V', Church News, August 1891(b).


endnotes
1 Sim and Stuart 1991; Gaitie & Sims 1992.
2 Skira 1990.
3 See Gaughwin 1978.
4 James Blackhouse in Plomer 1987:221; Broadfoot 1845; Elwes 1849; Bishop Nixon 1851; Pasco 1897; George Augustus Robinson in Plomer 1967, 1987; Starke 1986:17; Stokes 1846.
6 Ironically the aim of this act was to allow small settlers, who comprised the Islander population, to establish themselves on Crown Land.
8 Adam-Smith 1983.
9 The Mercury 27/5/43, 7/6/45.
10 Adam-Smith 1983.98, 7/6/45.
11 The Sunday Examiner Express 13/4/75.
12 Skira pers. com.
14 A quote from the Sunday Examiner 26 July 1980.
Pascoe, C. A Roving Commission, George Robertson and Co., Melbourne, 1897.


