

Bird Predation by Possums

Dear Sir

Colin Bassett comment in the February issue 55(4) of this journal makes fascinating reading but it suggests that predation of possums on birds was not known until the early 1950s. This is a misconception.

M. R. Skipworth (later Superintendent of Reserves in Dunedin but then a student at Canterbury and President of the Forestry Club (the forerunner of the New Zealand Institute of foresters/forestry) wrote an article on opossums. What follows are extracts from his 1928 account:

That opossums do eat birds' eggs and young birds is an undisputed fact, but little information has been collected as to the extent of such a practice. ... Professor Kirk, in examining the stomach contents of eighty-five animals, found in two cases, portions of unfledged birds, such as would be derived from eggs nearly hatched. This percentage is considered by investigators to be an almost negligible quantity, but taking these figures as a basis as an average per day for the diet of opossums, and estimating the numbers of opossums living in the bush during the summer months as 200,000, the number of birds destroyed would amount to at least 200,000 per annum. This is computed on taking the nesting season as fifty days, and each presence of bird remains as a mortality of one, but it is highly probable that in each case all the eggs or young in the nest are taken. As compared with the ravages of cats, stoats and weasels, this amount may be small, as Perham states, but the reason why so much attention has been focussed on the opossum, is that the State Forest Service encourages it, while it generally recognises the danger of the other animals. Considerable numbers of ground birds are killed by opossum traps in heavily trapped districts, the weka, kiwi and kakapo suffering heavily.

*As the opossum lives on many of the foods necessary for the welfare of the birds, it may cause much damage in this direction. In ordinary seasons of plenty the effect may be small, it is in the lean year that it comes into serious competition with the birds for food supply. By killing kotukutuku [*Fuchsia excorticata*] and rata, it reduces the sources of available foods, and the continual presence of the opossum in one district might result in the extinction of these species.*

From 1928 M. R. Skipworth "Opossums in our Forests" *Te Kura Ngahere* 2(3):13-15

Wink Sutton

The first radiata pine planting

Dear Sir

Te Ara, the online New Zealand encyclopaedia (www.teara.govt.nz) web site, records (settled landscape/ trees and garden/ radiata pine/ plantations in New Zealand/ Canterbury firsts) that:

The first recorded planting of radiata pine in New Zealand was in 1859, at Mt Peel Station in South Canterbury. The first recorded use of radiata pine timber in New Zealand was in 1893 at Leslie Hills Station, near Culverden, when Duncan Rutherford milled some 20-year-old pines and used their timber for farm buildings.

As I detail below this record may be incorrect.

The 1913 Royal Commission on Forestry claimed that radiata pine sawntimber from 20 year old trees was used in the construction of several houses at Barhill (on the banks of the Rakaia River) in 1877. There are several other independent references that confirm 1877 as the construction date of the Barhill houses. In 1913 the "radiata pine sawntimber" houses were inspected by the headmaster of the Barhill School and he reported that the timber was still in "perfect" condition - even after 36 years. This early and successful use was not the only reported use of the species that supported the Commission's strong support for radiata pine, but it was important.

To have been 20 years old in 1877 the initial radiata pine planting must have been in 1857. There are doubts about this record as there are no accounts of radiata pine being introduced as early as this. However, this important official record cannot be lightly dismissed.

There seems little doubt that the Barhill houses were constructed in 1877 and that some of these houses incorporated non-indigenous coniferous sawn-timber (it is doubtful that any observer could then have identified the wood other than it had come from a tree species that was not indigenous). If it was not radiata pine it must have been another introduced conifer timber species. Even if it was radiata it was only 20 years old and it is very likely that most trees were simply too small to saw. [In the nearby unthinned Eyrewell spacing trial at age 25 (the trial blew down in August 1975) the closer spacings were then considered too small to saw and only the wider spacings were sawn. Even at these spacings the trees were of marginal sawing size - the 3 x 3 metre spacing had a mean dbh of 27.8 cms while the 6.1 x 6.1 metre spacing had a mean dbh of 42.2 cms]. If the Barhill plantings were under 20 years of age they would be too small to have been sawn. If the conifer was not radiata pine what was it? Not being radiata pine the tree species would almost certainly have to be older than 20 years (i.e. planted in the 1840s) for the trees to be of sufficient size for sawing. Were there then any early plantings of introduced conifers?

I doubt if we have any basis now for questioning the official 1913 Royal Commission report. What is now overlooked is that in 1913 there would have been still alive those who remember the tree sawing, the Barhill house construction and maybe even the original tree planting.

The record in the 1913 Royal Commission should not be ignored.

Wink Sutton