Thus it appears that although underwater explosions do kill fish, their effect is restricted to areas in the immediate vicinity of the blast. To avoid even this mortality, California biologists have suggested the substitution of black powder for dynamite in seismic work. Experiments carried out in 1951 and 1953 showed that while dynamite killed caged fish placed nearby in every instance, even when the charges were as small as 1¼ pounds, blasts produced by black powder killed very few fish, even when the charge was as large as 45 pounds and cages were as close as 10 feet. In some tests, the cages were demolished, but the fish were not killed. The difference in effects of dynamite and black powder are apparently related to the characteristics of the energy discharge, the black powder burning more slowly and thus having a lower peak intensity.

BANDICOOTS TROUBLESOME AT KELMSCOTT

We are all familiar with the damage that kangaroos and emus cause to fences and crops and we know that possums are unwelcome in houses. Complaints of damage caused by other marsupials, however, are rare and not since much earlier days has anyone bemoaned to us the activities of bandicoots. Nevertheless, at least one property in recent times has suffered unwelcome visitations from these small but attractive animals whose habit of digging in gardens for insect larvae so worried early settlers.

The property concerned is the nursery of R. Traill-Nash & Son of Albany Highway, Kelmscott, about 14 miles from Perth. The bandicoot involved was, naturally enough, the Quenda or Southern Short-nosed Bandicoot (Isoodon obesulus). This animal was once very plentiful in the early days of settlement but declined, as civilization encroached into its habitat, until it became something of a rarity in developed areas. In recent years, in common with a number of other small marsupials, it seems to have increased in numbers wherever the native environment remains, and is commonly reported in the outskirts of the metropolitan area.

The damage suffered in this instance has been limited to young rose bushes and citrus trees, the roots of which are uncovered by the bandicoots in their search for grubs. About 50 rose bushes and young citrons were lost before trapping began in November 1963. The damage was caused by the same characteristic "pits" as wrought havoc in the potato patches and other gardens of the early settlers.

Anthopomorphists might suggest that the bandicoot means well, but it would be more realistic to acknowledge that the benefits of his propensity to attack destructive larvae may sometimes be outweighed by the damage he causes in seeking them out. His behaviour puts one in mind of modern man and his sometimes irresponsible use of pesticides as well as his tendency to destroy natural assets in providing improved transport and other facilities.

The nurseryman in this instance reacted with commendable forbearance. Instead of attempting to solve the problem in the usual way by destroying the fauna causing the damage, he sought and received assistance from the Western Australian Museum and this Department. Spring traps were supplied and the bandicoots were lured into them by a bait mixture devised by Mr. W.H. Butler, of the Museum. The bait consisted of crisp apples, richly bedaubed with an apparently irresistable spread of oatmeal, peanut oil, raisins and lard. Once trapped, most of the bandicoots were transported several miles away to Churchman's Brook, where the environment seemed satisfactory and where no nurseries or other gardens were in the immediate vicinity. Some, however, have been handed over to the University of W.A. for study. Mr. Traill-Nash tells us that the first female captured had 5 young fastened to the teats in her pouch. The young were then about the size of fully-grown mice but were hairless at that stage and their eyes had not opened.

About a dozen bandicoots were trapped in the first six months, after which the number was reduced. During the 1964/65 summer, however, the damge recommenced as the quendas were again attracted to the nursery, apparently by the larvae to be found in recently disturbed and watered soil. Mr. Traill-Nash will recommence trapping and removing the attractive but troublesome few that still shelter in the adjoining bush.