

15.

\*Small - 15 lbs.  
\*Medium - 15 - 40 lbs.  
\*Large - 40 lbs.

Table III

Bait Schools Sighted	
Small	32
Medium	14
Large	-
Total	46

SUCCESSFUL FIELD DAY  
HELD AT THE  
TUTTANNING RESERVE

The Field Day conducted on Friday, November 3 by this Department in liaison with the University of W.A., Botany and Zoology Departments was attended by 106 people.

In his opening address the Minister for Fisheries and Fauna, Mr. G.C. MacKinnon referred to this being a momentous occasion for it had been 14 years since the last Fauna Bill was before Parliament.

He said that the basic philosophy of the Bill has been praised by both Houses. In a way this Reserve was a pretty clear example of what has to be done. Man and his progress is probably the greatest enemy of the animals, so we must the Minister said, look for and introduce some conservation programmes. The development of land for agriculture further endangers its chance of survival.

Professor Main in his talk said that the plant diversity of Tuttanning Reserve made it precious. Over 300 species have been recorded. This diversity governs the number of species of animals that can be found on this reserve.

The problem of reserve management is, the regulation of animal numbers in such a way that the persistence of the population is ensured while the habitat remains intact with its present diversity of plants.

This problem is not unique to Tuttanning; it is a problem to be studied on all reserves. However, it is easier to establish the elementary principles of reserve management by concentrating the available and very limited manpower in one locality. Thus Tuttanning has become an area where study methods are being devised and management procedures developed.

The study programme has tried to establish what type of plants an animal needs for cover (a home or place to live) and what it needs for food. Since the area has been periodically burnt a special part of the study has been devoted to determining how long it takes for plants to grow to a size suitable for cover. Since 1961 many areas have been under close study and the growth of many individual plants has been measured. Surprisingly, no area has yet regrown sufficiently to afford adequate cover. This shows that an area burnt every 6-7 years would only support a variety of quick growing early seeding plants that are of little use to the rarer mammals which require much older plants for cover. It seems, therefore, that there is a need to divide the reserves into a larger number of areas that can be burnt every 10 or 15 years.

The most desirable regeneration occurs following late summer-autumn. Last autumn certain areas were selected for burning, but early rains prevented this. However it is felt that sufficient is now known about the reserve and its fauna for a long-term burning programme to begin, so in addition to fire breaks selected blocks will be autumn-burnt from time to time.

A population study has shown that at all different seasons of the year, animals occupy different parts of the reserve. A male bettong for instance needs 100 acres to live in and to provide him with all the requirements for the seasonal needs. Trapping is one form of population study, radio tracking is another.

Professor Main said that nutrition study tells us of their needs. Study conducted so far has been mainly on the Abrolhos wallaby, and it has been found that they can survive on even-dry chaff and only sea water to drink. He said if sheep could live on this, most farmers would be very happy.

#### NEW LEGISLATION

Two new pieces of legislation passed during the parliamentary session just concluded will be administered by this Department. They are the Fauna Protection Act Amendment Act, 1967, and the Fisheries Act Amendment Act, 1967.