

The Thylacine

ERIC R. GUILER

NONE of the Tasmanian marsupials has captured such wide interest as the thylacine, *Thylacinus cynocephalus*, for which the popular names of Tasmanian wolf, tiger and hyena are used. It is not uncommon to hear thylacines referred to as 'bull tigers' or 'greyhound tigers'. Strictly speaking, the thylacine is not related to the wolf, the tiger or the hyena, and for this reason the word thylacine is preferable as a common name.

Characteristics

The thylacine is a marsupial, carrying its young in a pouch, and the generic name *Thylacinus* refers to this habit. It is related to the native cat, the tiger cat and the Tasmanian devil, all belonging to the family Dasyuridae. The thylacine is easily separable from any of these by its large size, as it stands about 2 feet high at the shoulder. Further distinguishing characteristics are the dog-like head (hence the specific name of *cynocephalus*) and the presence of about thirteen stripes on the rump, from which the animal obtained its name of tiger or hyena. The thylacine has a rigid tail and cannot wag it as a dog does.

The head of a male thylacine is more wolf-like than that of a female, which is short and broad; thus males and females can be readily distinguished, apart from the presence or absence of a pouch. At one time the two sexes were believed to represent two different species.

One of the animal's most striking features is the tremendous gape. I have seen a cinema film of a thylacine yawning and the gape can only be described as phenomenal. The lower jaws, when fully open, give the impression of being disarticulated from the skull.

Distribution

E. D. Gill has reviewed the evidence for the mainland distribution of the thylacine as discovered in cave deposits, and he found that in the Quaternary period thylacines once roamed the Australian mainland. They have since become extinct on the continent, but there is no evidence to show that man was in any way responsible for this. Reports are made from time to time of some large animal, which is supposed to look like a 'tiger', frequenting dense bush country in Queensland. But no specimens have ever been produced. Tasmania became the thy-

lacine's last stronghold, and early settlers found numbers of thylacines roaming the plains areas and in the mountain country, though it should be borne in mind that the species, while numerous, was never as common as, for example, the possum or kangaroo.

Decline in Numbers

When sheep were introduced into Tasmania, thylacines started to kill them. They may have done so in periods of adverse weather or when other food was not available, but it is unlikely that they became sheep-killers in general. Nevertheless, thylacines were branded as killers and a war of extermination was waged against them. The Government offered £1 per head, though a carcase was worth more than this since graziers also would reward a trapper. As early as 1863, John Gould noted that the thylacine faced extinction; by 1909 G. Smith was very concerned about the future of the species; by 1920 live thylacines were worth £20 each, and by 1930 specimens were very rare and could not be procured for even £50.

It is probable that the killing campaign and the clearing of land (with its consequential effect upon the habitat of the thylacine) were the principal factors in the decline of the species. However, the late Mr Fred Burbury of Paratiah, in a letter to me, has put forward the interesting view that a disease 'like distemper' swept through the dasyures about 1910 and that thereafter Tasmanian devils, native cats, and tiger cats, together with thylacines, became very scarce. While it is unlikely that this statement can ever be confirmed by scientific evidence, it is important that it should be placed on record. Fur-trappers used to kill thylacines from time to time, to keep them from eating snared game, but this was only a minor factor in hastening the decline of the population. The possibility that the decline in numbers was due to some long-term population cycle about which nothing

is known must not be overlooked. The thylacine was placed on the 'wholly protected' list in 1938, but this may have been too late to be of any use.

Footprints

Thus we have an animal which once ranged Tasmania, to quote Gould, 'from sea level to the tops of mountains'. Is it extinct? An animal believed to be a thylacine was killed at Sandy Cape in 1961. The last thylacine produced was shot and killed at Mawbanna, on the north-west coast of the island, in 1930. Since then several expeditions have searched for it, the last one in 1963-4. These expeditions have all concentrated upon the rugged western parts of the State, but none has ever brought back a photograph or a specimen, although various footprints of the animal have been found. The best description of these is that of R. I. Pocock in 1926. It is clear from his figures that, under all but soft conditions, only four claws appear on the impression of each foot, but that five will occur on the fore-foot in soft mud. An examination of the feet of stuffed specimens confirms this statement. The print of the hind-foot under ideal conditions may show a long (6 inches or so) tarso-metatarsal pad, but such an impression is rarely found. The expeditions brought back prints from the Jane River area near the west coast, as well as other localities on the north-west and west coasts, and footprints have been collected near Hobart.

From footprints collected by the expeditions and from other prints collected since 1957, we can assume with some degree of certainty that the thylacine is not yet extinct. In fact, unconfirmed reports of its presence are becoming more frequent. However, caution must be exercised in interpreting these, since the great publicity obtained by such Press reports may have something to do with their frequency.

Habits

Very little authentic knowledge is available as



H. Burrell

This photograph shows the characteristic rigid tail and striped rump of the thylacine. It is primarily a flesh feeder, and eats only selected parts of its prey

to the habits of the thylacine. We know that it eats kangaroo, wallaby and probably the smaller marsupials. It will eat chickens when available and also sheep, but these only when hard-pressed for food. It eats only selected parts of its prey and is primarily a blood-feeder, sucking blood from the severed jugular vein of its kill. It is known to eat also the vascular nasal tissues, as well as the liver and the kidney fat. It may occasionally eat the meat.

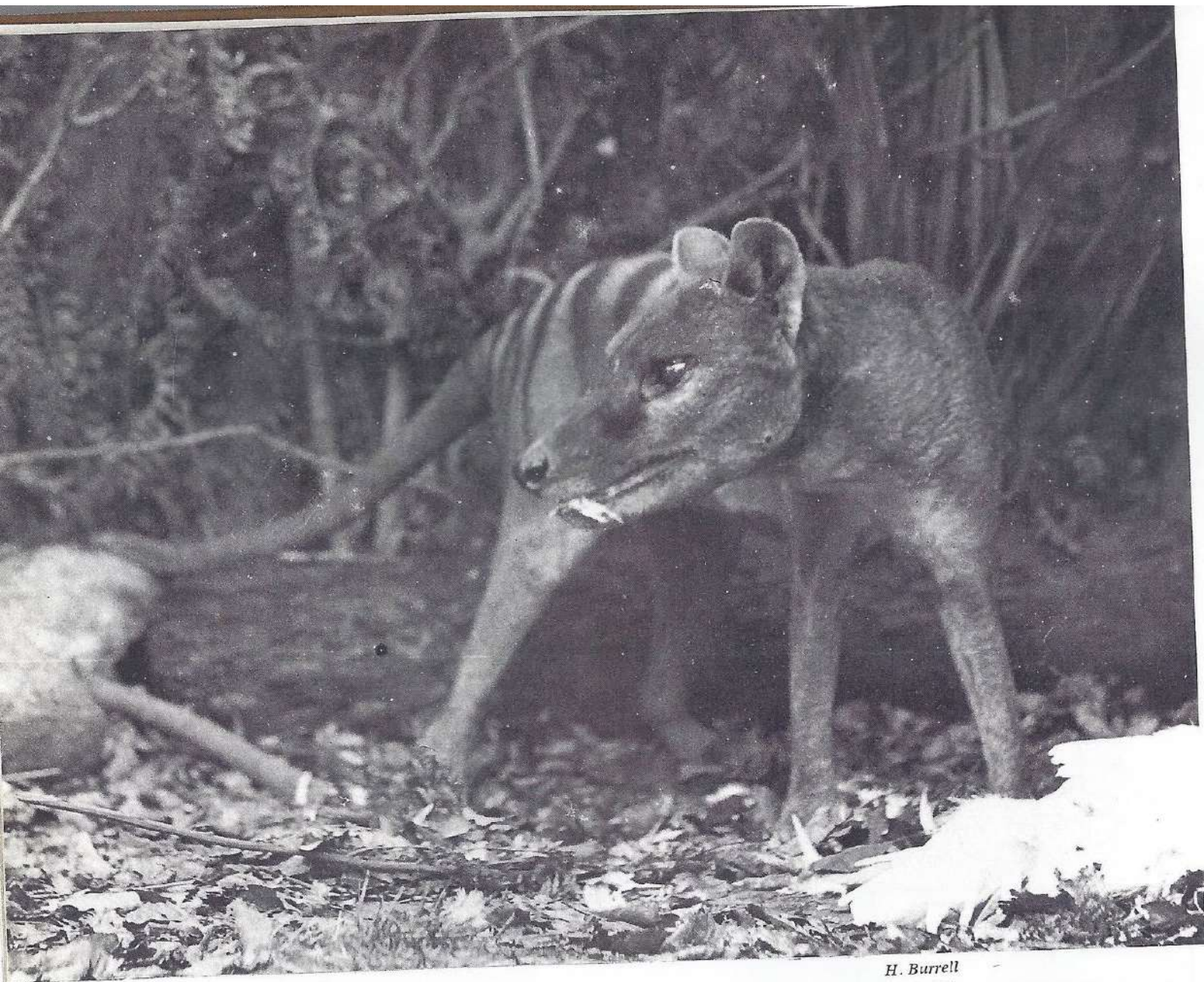
It is known that the thylacine hunts usually as a solitary animal though sometimes a male and female have been seen together. Apparently at times the young join the parents in hunts, and family units of up to four individuals have been reported. The thylacine is not a rapid runner but relies on a steady jogging pace to wear

down its prey, which it catches in a final spurt of speed and then kills.

Although it hunts by night, some movement may take place during the day, and the animal often moves about at dusk. It has been stated that its vision by day is poor. In spite of this some thylacines bask in the sunlight, and other nocturnal marsupials, such as kangaroos and the potoroo, also do this.

During the breeding season in December the thylacine retires to a den in either a cave or a hollow log and there three or four young are reared at a time.

The noises made by thylacines are varied. The animals make a coughing, barking noise when hunting, a low growl when irritated (probably as a warning), and a whining noise like



H. Burrell

This photograph of a living thylacine, or Tasmanian tiger, shows the remarkably dog-like head which caused it to be given the specific name *cynocephalus* (wolf head)

that made by a puppy. This whining sound is perhaps used as a method of communication between individuals.

Many improbable stories have been written about the thylacine. Thus the animal is credited with bipedal locomotion, an inability to swim, tremendous jumping power and great ferocity.

The fact that these stories gain credence is additional evidence of the intense, if imaginative, interest in the thylacine. Recent discoveries and field work are throwing some light upon the ecology of this interesting species and it is hoped that more useful information about it will be gathered in the future.