DEER IN QUEENSLAND

By C. ROFF*

SUMMARY

Fallow deer, *Cervus dama* L., axis or chital deer, *C. axis* Erxleben, red deer, *C. elephas* L., and rusa deer, *C. unicolor* Kerr, are present in Queensland, and under fauna conservation legislation are protected.

Results of the first survey since deer were introduced over 80 years ago indicate that present populations and distributions of the fallow, axis and rusa deer do not warrant and would not support a policy of open season hunting. Red deer offer possibilities in this regard, but before implementation could be considered, well defined and adequately staffed management areas would be required.

I. INTRODUCTION

Under Queensland conservation laws, deer are protected and may be destroyed only as pests after special permits have been obtained. In recent years attention has been directed to these introduced animals by requests for open hunting seasons, and in some instances by reports of illegal shooting. Accordingly,

Fig. 1.—Crossing Cooyar Creek while hunting red deer, April 5, 1956.

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to appreciate the present position earlier writings were consulted, and from October 1, 1955, to June 30, 1957, a relevant field survey was made. This included traverses, usually over a long day, more intensive observations during hunting trips (note Figure 1), and discussions with residents and officers of the Department of Forestry and the Department of Agriculture and Stock who are familiar with and interested in deer. Inspections concerned with applications for permits to destroy deer provided further opportunities for field observations.

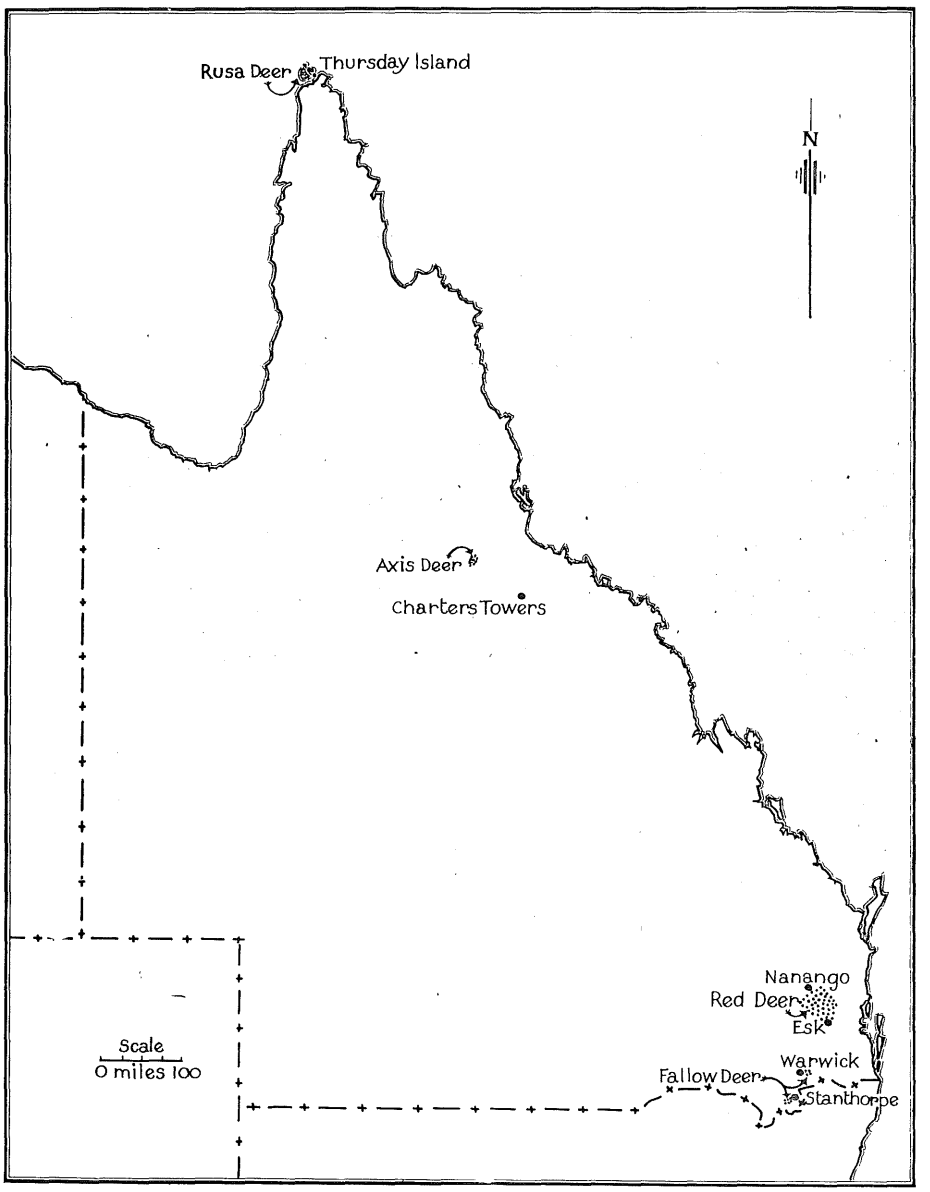

Fig. 2.—Distribution of deer in Queensland.

Fallow deer, *Cervus dama* L., axis or chital deer, *C. axis* Erxleben, red deer, *C. elephas* L., and rusa deer, *C. unicolor* Kerr, have been released in Queensland and still exist (Figure 2). Each is discussed under species heading.

II. FALLOW DEER

(a) Importations and Releases

According to Bentley (1957) fallow deer were introduced into Tasmania from Great Britain about 1850. Three stags and seven hinds were despatched to the Acclimatisation Society of Queensland (referred to hereafter in literature references as A.S.Q.) by Mr. J. Bisdee of Hobart (A.S.Q. 1865), and arrived in Brisbane on the vessel "Cawarra" on February 17, 1865 (A.S.Q. 1866). These were held at Bowen Park, Brisbane, for several years; during 1866, six calves were dropped, of which four survived (A.S.Q. 1866), and by 1869 the deer were breeding well in captivity (A.S.Q. 1869).

Details of all releases are somewhat obscure, but by 1870 several lots from Bowen Park had been liberated on the Darling Downs at Maryvale and Westbrook, and in 1873 these were reported as doing well (A.S.Q. 1873a). Others liberated on the Main Range near Toowoomba had bred successfully (A.S.Q. 1873b). Six released on "Canning Downs", near Warwick, in 1872 (A.S.Q. 1874) were a nuisance to crops and were exterminated (Hall 1923). Deer had been seen near Allora, but these were quickly destroyed and none has been observed in that district during recent years.

About 1890 a number of stags and hinds were brought from Tenterfield, New South Wales, by Mr. C. F. White of "Pikedale", near Stanthorpe, and released on that property.

(b) Dispersal and Comments

This species is confined to areas associated with only two release points (Figure 3). In the Upper Freestone Valley, mountainous country affords some protection: in the lower lands, damage to field crops may be experienced but the goodwill of those most concerned is basic to the continued existence of fallow deer in the area. Wider dispersal onto the Darling Downs and adjacent country has been prevented by urban populations and the development of closely settled agricultural lands.

On "Pikedale" the deer (Figures 4 and 5) may sometimes forage in lucerne and improved pastures, but this herd of about 60 is primarily a private one. The small number present in country closely adjacent to this property was not determined.

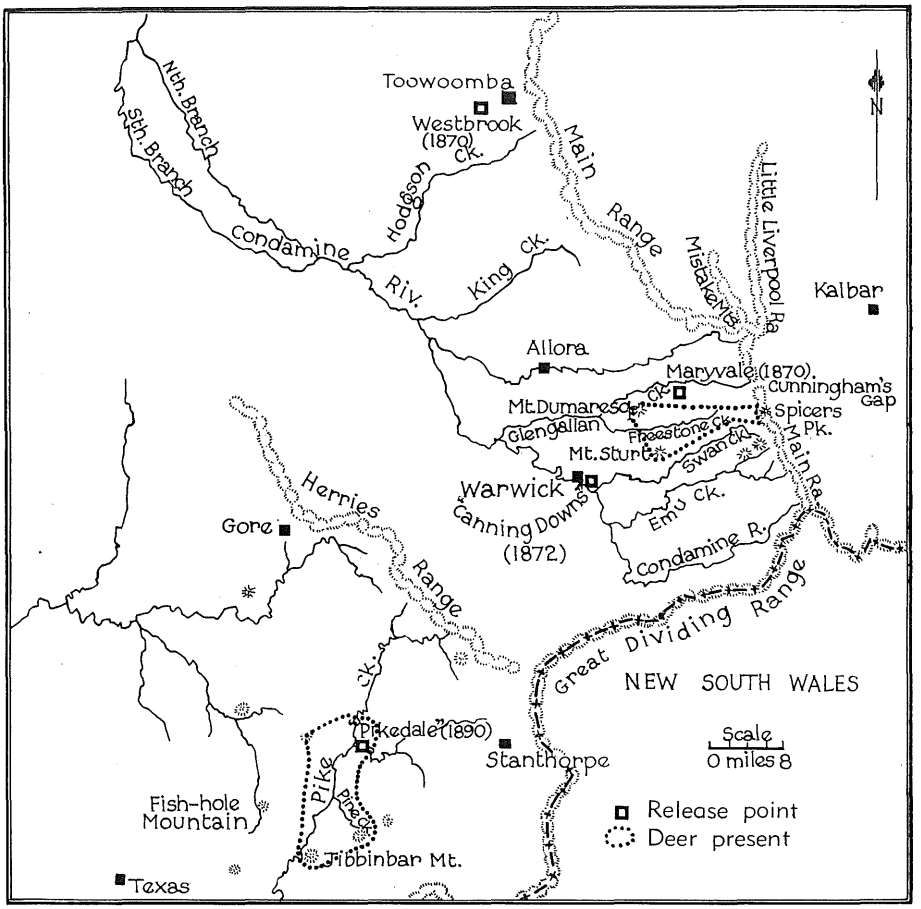

Fig. 3.—Dispersal of fallow deer.

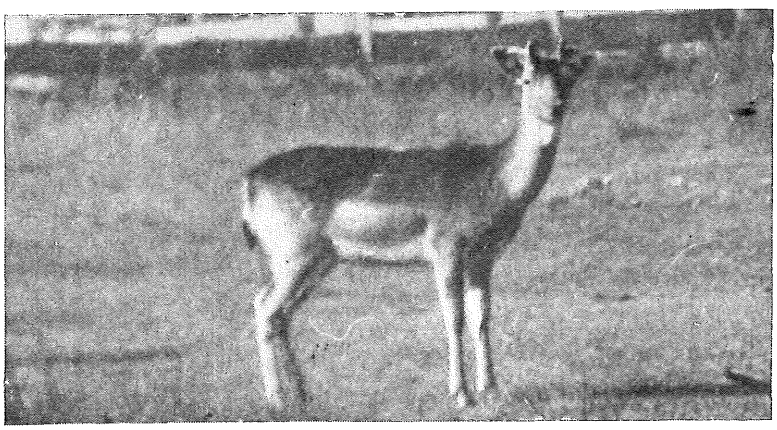

Fig. 4.—A young fallow stag, Pike Creek, April 8, 1957.

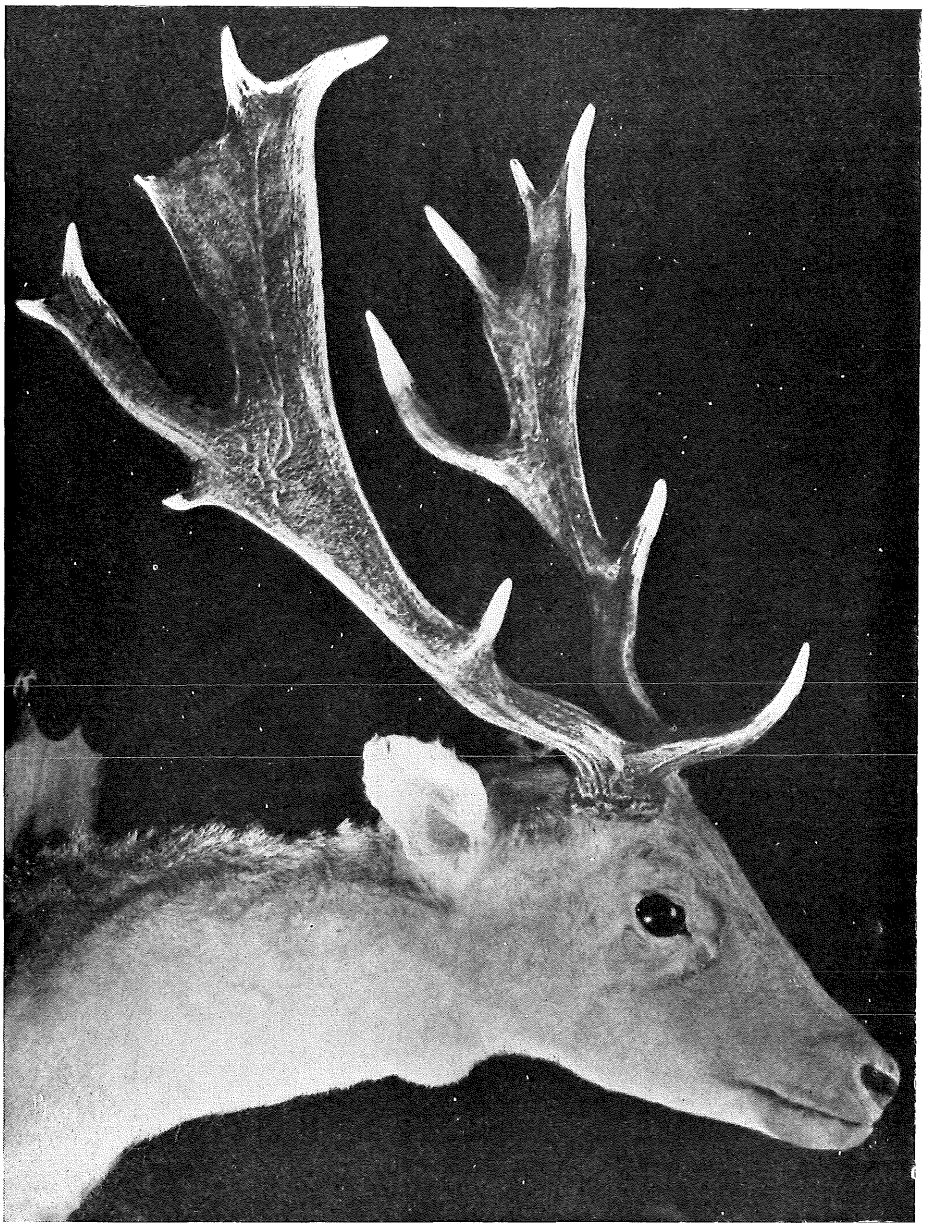

Fig. 5.—Antlers from a fallow deer, "Pikedale", July 8, 1957.

III. AXIS DEER

(a) Importations and Releases

In 1867 Javan spotted deer were imported from Batavia by the Acclimatisation Society of Queensland (A.S.Q. 1868), and during 1872 five of these, which were then referred to as axis deer, were released on Mr. A. Weinholt's

property, "Maryvale", on the Darling Downs in south-eastern Queensland (A.S.Q. 1872). Various reports (A.S.Q. 1873a, b and d) indicate that progeny of these deer were observed.

During one of the voyages of the steamship "Quetta", the master (Captain Jarvis E. Withers) was given an axis deer in Ceylon. On arrival at Townsville in August, 1886, this hind was given to Mr. William Hann, a passenger (Anon. 1886) and the owner of "Maryvale", via Charters Towers, North Queensland. A few years later Mr. Hann imported a stag and a hind (Figure 6), and later another stag. These and progeny were eventually released.

Fig. 6.—Mr. William Hann, of "Maryvale", via Charters Towers, with axis stag and hind imported from Ceylon. (Copy of a photograph taken in 1889.)

(b) Dispersal and Comments

The presence of axis deer on the Darling Downs has not been recorded during recent years.

Some 300 are on "Maryvale", Charters Towers (Figure 8), and a herd of similar size is present on "Niall", which is also on Maryvale Creek (Figure 7). Dingoes prey heavily on the deer, which seldom move more than a few miles from the homesteads.

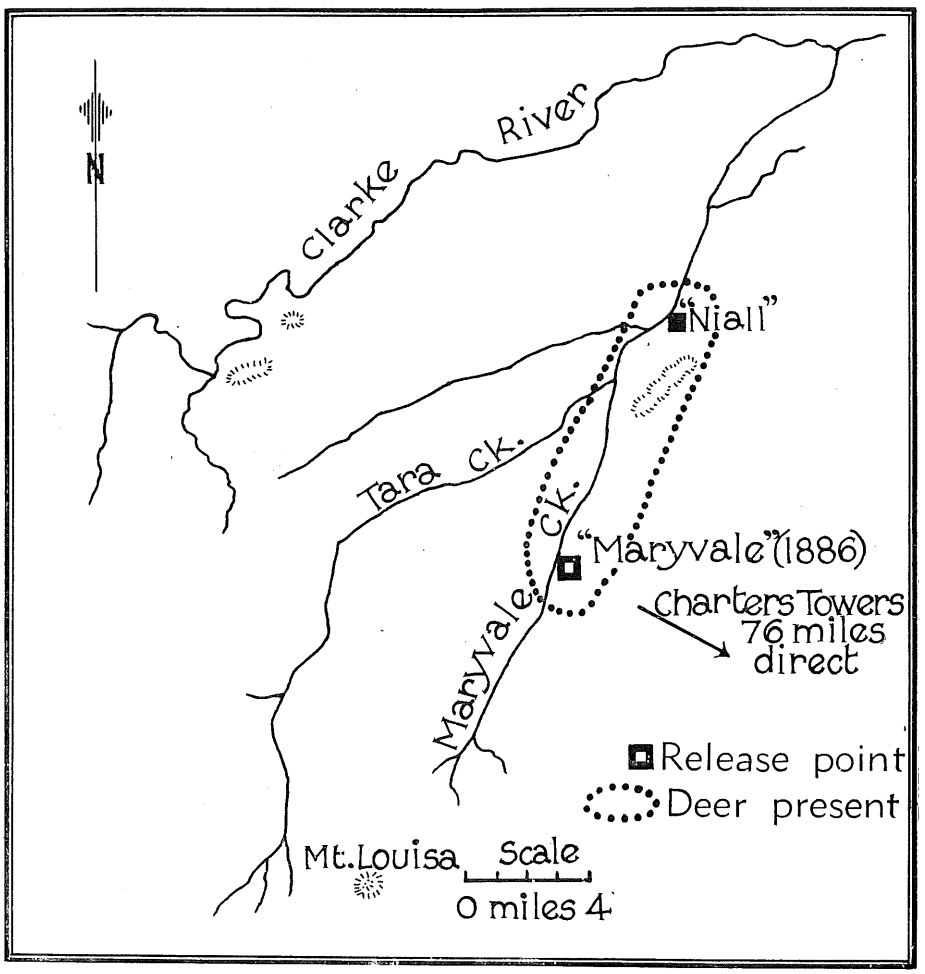

Fig. 7.—Dispersal of axis deer.

During January, 1956, two were seen on "Wando Vale", 30 miles west of "Maryvale", Charters Towers, and in that year another two were observed on "Wairuna", 80 miles north. On May 8, 1956, an axis stag was shot on "Russleigh", via Isisford, a locality about 360 miles south-west of "Maryvale". No reasonable explanation is offered for this dispersal.

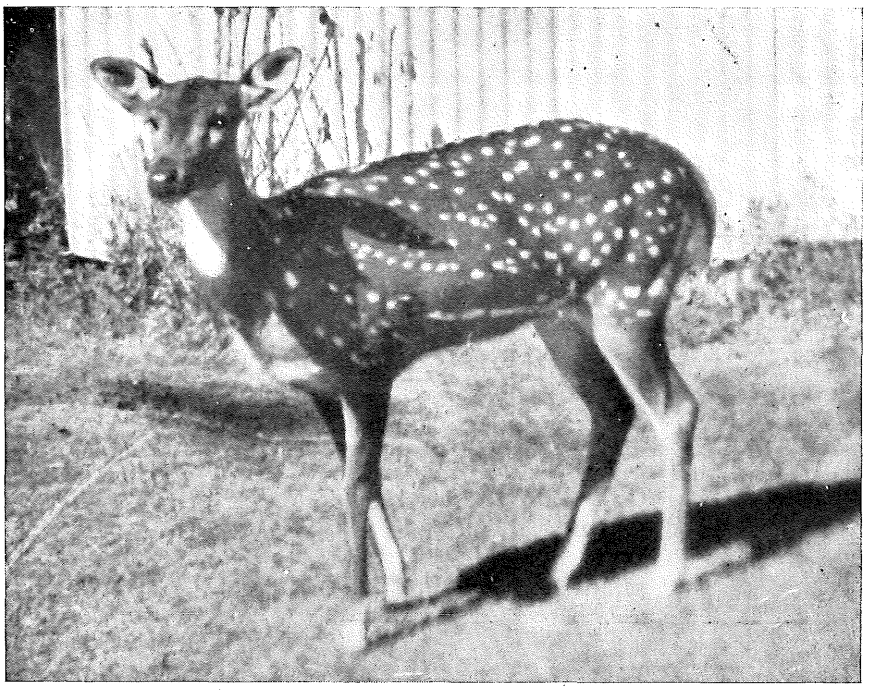

Fig 8.—Semi-domesticated young axis hind, "Maryvale", via Charters Towers. (Photograph by E. C. Clarke, "Maryvale", 1956.)

IV. RED DEER

(a) Importations and Releases

There are several references to the introduction of red deer into Queensland for the purposes of providing additional food and sport for the early colonists (Anon. 1873; A.S.Q. 1873b; Pugh 1874; Banks 1931). The first consignment, two stags and four hinds from the Windsor Park herd in England, was a gift from Queen Victoria to the Acclimatisation Society of Queensland, and arrived in Brisbane on the "Great Queenslander" in early September of 1873. On September 23 of that year these animals were released near Scrub Creek, "Cressbrook" (A.S.Q. 1873c) (Figure 9). A second consignment of six deer from the Duke of Richmond's estate in England was imported by the Acclimatisation Society, and on June 2, 1874, was released at the same locality, when it was apparent that the original releases were thriving in the nearby ranges (A.S.Q. 1874).

Table 1

FIELD SURVEY OF RED DEER

Date	Number Sighted	Locality	Observer
1955			
Oct. 1	1	East Branch, Brisbane River	C
11	1	East Branch, Brisbane River	C
10	5	Oaky Creek (Greenwood Creek)	A & B
10	15	Oaky Creek	B
10	5	Marble Top Mountain	A & B
..	1	Wengenville	H
Nov. 11	1	Tom Tom Scrub, near Oaky Creek	A & B
..	4	S.F.R. 299, Nanango	B
..	1	S.F.R. 299, Nanango	B
Dec. ..	1	Nukinenda Creek	D
..	1	Nukinenda Creek	D
1956			
Feb. ..	1	S.F.R. 299, Nanango	B
..	1	S.F.R. 299, Nanango	B
..	4	Kandanga Creek	J
..	1	Kandanga Creek	J
..	1	Kandanga Creek	J
..	1	Kandanga Creek	J
..	1	Amamoor Range	I
..	1	Jimna Range	G
Mar. 19	1	Cooyar Creek (Mellera Creek)	C
..	1	Linville	C
..	1	Linville	C
..	1	Linville	C
..	1	Bluff Mountain	E
..	1	Bluff Mountain	E
..	1	Bluff Mountain	E
..	1	Conondale Range	G
..	2	Kandanga Range	K
..	1	Kandanga Creek	J
..	1	Amamoor Creek	I
..	1	Amamoor Creek	I
Apr. 5	1	Cooyar Creek	A & C
5	2	Cooyar Creek	A & C
5	1	Avoca Creek	A & C
6	1	Cooyar Creek	A & C
7	2	Taromeo Creek	A & C
..	1	Jimna Range	G
..	1	Jimna Range	G
..	1	Jimna Range	G
..	1	Kandanga Creek	J
May 22	1	Jimna Range	A
24	1	Kandanga Creek	A
24	39	Kandanga Range	A
..	1	Jimna Range	G
..	1	Conondale Range	G
..	1	Little Yabba Creek	H
..	1	Little Yabba Creek	H

FIELD SURVEY OF RED DEER—*continued*

Date	Number Sighted	Locality	Observer
June ..	1	Yabba Range	A
..	1	Yabba Range	A
..	1	Yabba Range	A
July 11	32	Cooyar Creek	C
..	3	S.F.R. 299, Nanango	B
Aug. ..	7	S.F.R. 299, Nanango	B
..	5	S.F.R. 299, Nanango	B
..	5	S.F.R. 299, Nanango	B
Nov. ..	2	Somerset Dam	F
Dec. ..	1	Somerset Dam	F
..	1	Yabba Creek	H
1957			
Jan. ..	1	Somerset Dam	F
Feb. 19	1	Cressbrook Creek	E
19	1	Cressbrook Creek	E
24	1	Stanley River	A
..	1	Monsildale	C
..	1	Cooyar	D
..	1	Blackbutt	D
Mar. ..	1	Biarra Range	E
..	1	Biarra Range	E
..	1	Biarra Range	E
..	1	Toogoolawah	E
..	1	Brisbane River	E
..	1	Brisbane River	E
..	1	Brisbane River	E
..	1	Brisbane River	E
..	1	Somerset Dam	E
..	1	Stanley River	E
Apr. ..	1	Little Yabba Creek	H
..	1	Little Yabba Creek	H
May 14	1	Cooyar	D
22	1	Little Yabba Creek	H
..	1	Crow's Nest	D
..	1	Crow's Nest	D
June 22	3	Elgin Vale	A
22	2	Elgin Vale	A
..	5	Conondale Range	G

(b) Dispersal

Red deer are well established in the mountain ranges encircling the headwaters of the Brisbane and Stanley Rivers, Cooyar and Emu Creeks, and the many tributaries (Figure 9). Populations are generally sparse (see Table 1), the larger being in areas where cleared grassy slopes, open forest and rain-forest are in close association (Figure 10).

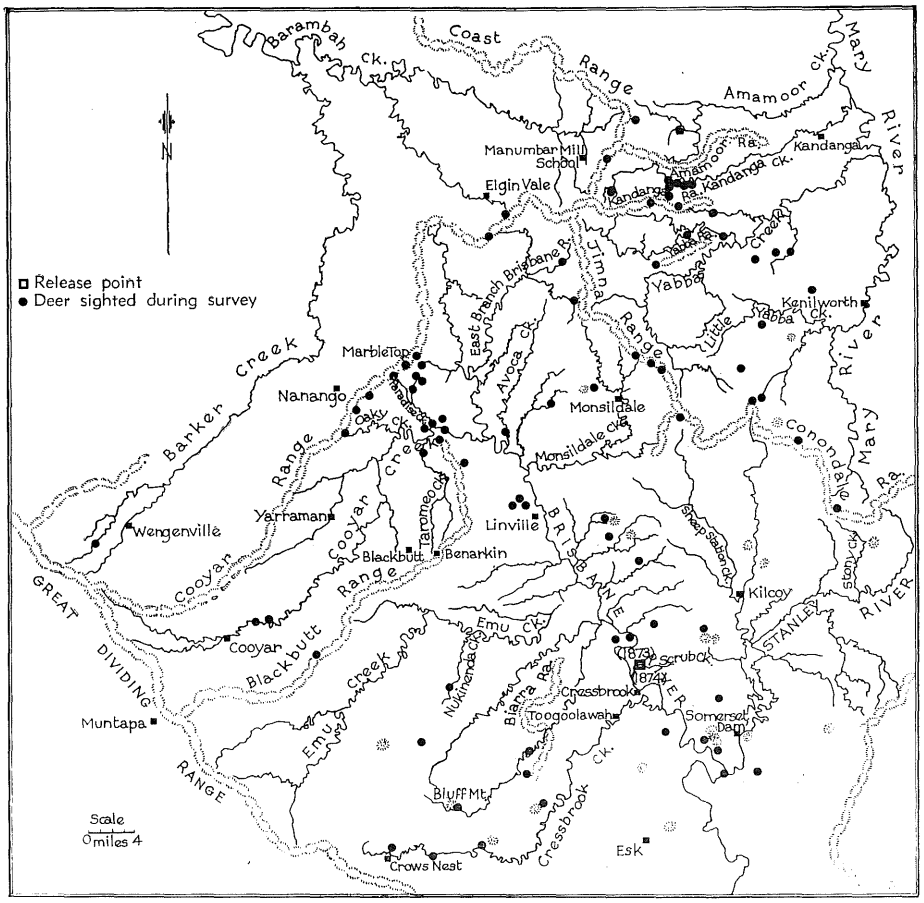

Fig. 9.—Dispersal of red deer.

There is some evidence of a further gradual dispersal into Coast Range country, and westwards towards the Great Dividing Range.

(c) Other Observations

Red deer in Queensland (Figures 11 and 12) are either dark-brown, red-brown or grey-fawn. The calves are white spotted. Usually, adult shoulder height does not exceed 4 ft, and the only weight recorded was that of a pregnant hind at 202 lb. The antlers rise in an outward curve, rounded throughout, and heads with as many as 12 points were noted.

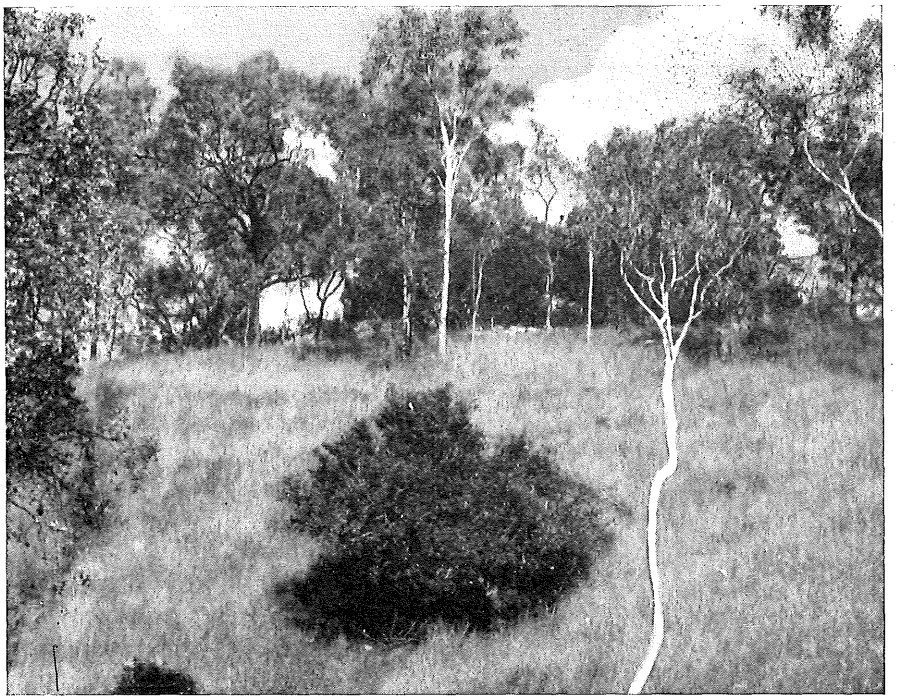

Fig. 10.—Typical red deer country near Cooyar Creek, April 8, 1956.

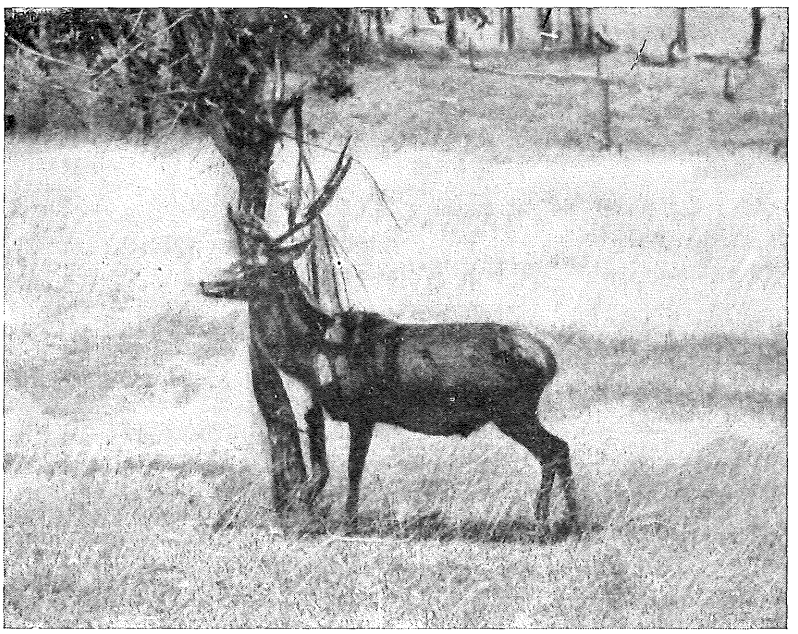

Fig. 11.—A red stag, Elgin Vale, February 2, 1957.

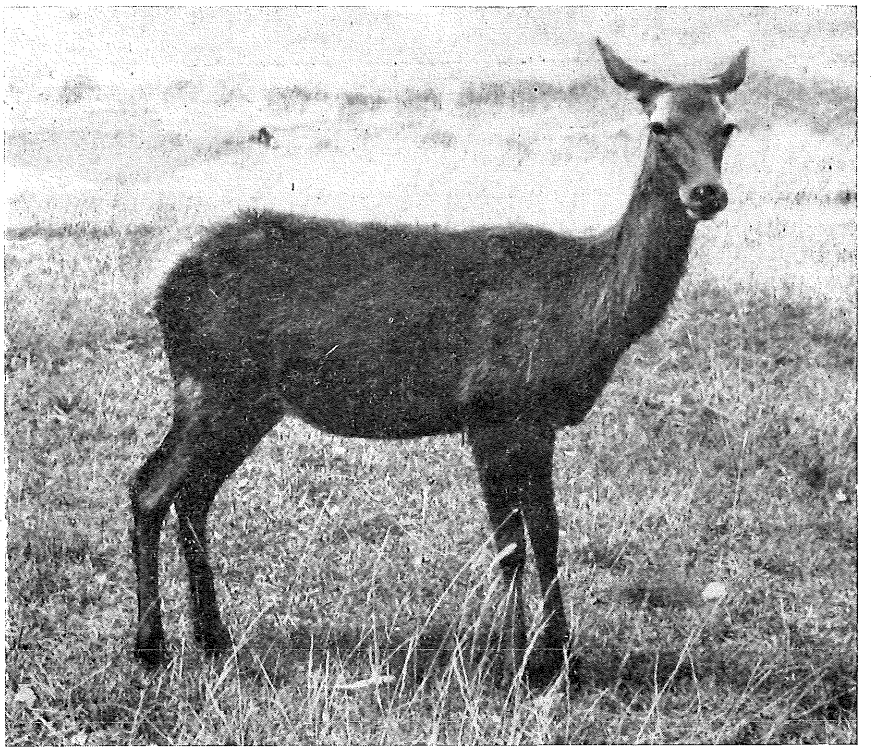

Fig. 12.—A red hind, Elgin Vale, February 2, 1957.

Seasonal behaviour is broadly outlined in Figure 13. Individual stags are in rut for about a month. During the roaring and rut season they rub their antlers on trees and shrubs, sometimes removing the bark of saplings from ground level to 6 ft up the trunks. In natural forests the species favoured as rubbing trees are blue gum (*Eucalyptus tereticornis* Sm.), grey ironbark (*Eucalyptus drepanophylla* F. Muell.), silver-leaf ironbark (*Eucalyptus melanophloia* F. Muell.), Moreton Bay ash (*Eucalyptus tessellaris* F. Muell.), pink bloodwood (*Eucalyptus intermedia* R. T. Baker), gum-topped box (*Eucalyptus hemiphloia* F. Muell.), wattle (*Acacia* sp.), Bunya pine (*Araucaria bidwillii* Hook.), dogwood (*Jacksonia scoparia* R. Br.), and forest oak (*Casuarina glauca* Sieb.).

In reafforested plantations a few pines (*Pinus patula* Schl. and Cham.), some 20 ft in height have been killed by similar rubbing. Deer also damage this species by browsing, particularly in dry seasons during the two years following planting. Although the percentage of trees affected is small, some replantings have been considered desirable.

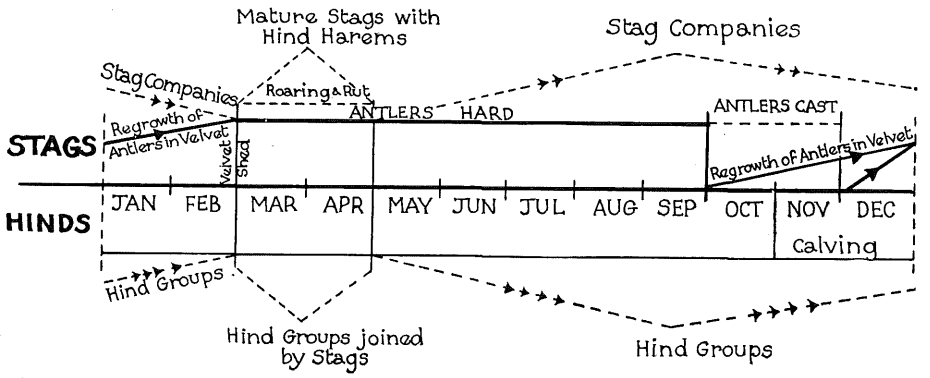

Fig. 13.—Seasonal behaviour of red deer.

On farmlands along the watercourses in the upper Brisbane Valley, deer feed on crops such as maize, oats, sorghum and lucerne.

Cattle tick, *Boophilus microplus* (Can.), was noted on three of the deer shot during the survey, but this phase of the investigation was not quantitative.

(d) Comments

The topography and land use, mostly pastoral, of the dispersal area are generally suited to red deer, and afford an appreciable amount of natural protection, but at the same time present difficulties in implementing some aspects of fauna conservation such as the prevention of all illegal shooting. That such shooting has occurred is supported by considerable circumstantial evidence, and the existence of antler trophies.

This deer country includes a number of fauna sanctuaries (State forest reserves and some private lands), a factor which complicates the formulating of an open season hunting policy which would adequately protect deer and not adversely affect the interests of farmers, foresters, graziers and sportsmen.

To date, controlled shooting has given reasonable satisfaction as a method of controlling red deer as pests.

V. RUSA DEER

(a) Importation and Releases

In 1912 this species was brought from the Celebes and the Moluccas to Friday Island in Torres Strait by Mr. R. A. C. Hockings, of Thursday Island. The animals thrived and some years later were found on the nearby and much larger Prince of Wales Island. About 1914 some were transferred to Possession Island (Figure 14). Reports that rusa deer are on the mainland have not been confirmed. (In 1952 four stags and three hinds were liberated on North East Island, Northern Territory).

(b) Comments

The sizable herds on these islands were decimated by troops during World War II.

VI. GENERAL CONCLUSIONS

The results of this survey and other field observations indicate that the present populations and distributions of fallow, axis and rusa deer do not warrant and would not support a policy of open season hunting. Red deer offer possibilities in this regard, but before implementation could be considered, well defined and adequately staffed management areas would be required.

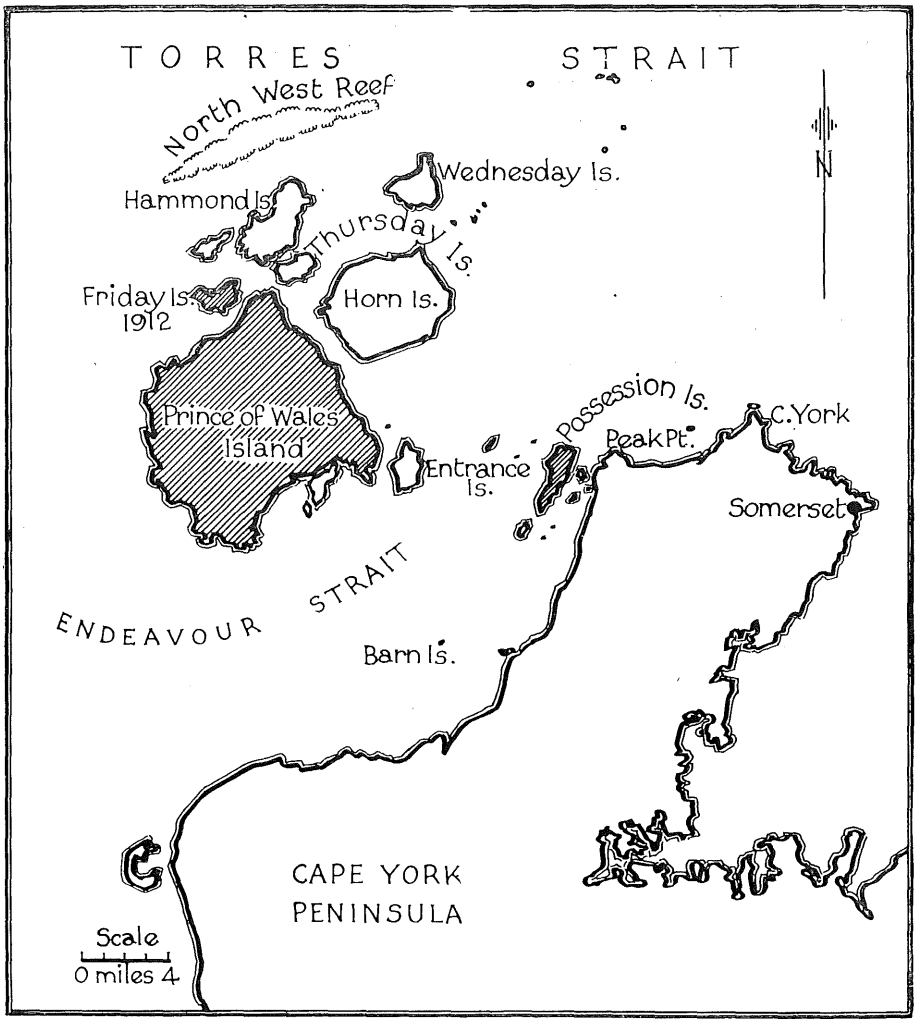

Fig. 14.—Distribution of rusa deer.

VII. ACKNOWLEDGEMENTS

These investigations were facilitated by the following and their assistance is gratefully acknowledged:—Messrs. E. Duncan (Forest Ranger, Nanango), E. Bishop ("Swansdown", Linville), E. Clarsen (Upper Freestone), W. Dempsey (Freestone), T. Aikin ("Pine Creek", via Stanthorpe), E. C. Clarke ("Maryvale", via Charters Towers) and H. N. Hockings (Thursday Island).

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(Received for publication October 5, 1959)