WESTERN RINGTAIL POSSUMS — TRANSLOCATION

6342. Hon Paul Llewellyn to the Parliamentary Secretary representing the Minister for the Environment

I refer to the translocation of endangered western ringtail possums for clearing of habitat, and I ask —

(1) What year did the Department of Environment and Conservation (DEC), formerly the Department of Conservation and Land Management, commence translocating western ringtail possums from development sites?

(2) Which developments have been required to translocate western ringtail possums and who were the developers for each site?

(3) When did the translocations take place from each development?

(4) How many western ringtail possums were translocated from each development?

(5) Where were the western ringtail possums translocated to?

(6) How much habitat was cleared at each development referred to at (2), in hectares?

(7) What information was recorded for each translocated western ringtail possum?

(8) How much was the developer contribution for each translocation event?

(9) Who was the officer responsible for each translocation?

(10) Which translocation events have been monitored for western ringtail possum survival?

(11) How many western ringtail possums were radio-collared?

(12) For each translocated western ringtail possum that has been monitored, —

(a) where and when did the monitoring take place; and

(b) what was the survival rate for each translocated western ringtail possum that was monitored after one year, two years and five years?

(13) How much money has the DEC received in developer contributions for western ringtail possum translocations up to 30 June 2007?

(14) Does the Minister believe that the translocation of western ringtail possums from development sites is successful in conserving the species as compared to in-situ conservation?

(15) Will the Minister table the latest evidence that shows the efficacy of the western ringtail possum translocation programme?

(16) If no to (15), why not?

Hon SALLY TALBOT replied:

(1) 1994.

(2) The following is a list of developments and associated developers:

Port Geographe — Tallwood Nominees
Busselton Aquatic Centre — Shire of Busselton
East Busselton Primary School — Department of Education and Training
Dalyellup — Satterley Property Group
Busselton School site abutting Aquatic (Recreation) Centre — Department of Education and Training
Novacare — Novacare Busselton Village
Cape View, Little Colin Street — Pindan Seas
CapeCare / Ray Village — CapeCare
National Lifestyle Villages — National Lifestyle Villages.

(3) The following is a list of developments and translocation dates:

Port Geographe — May 1994, April, July, and November — December 1995, February and April-May 1996
Busselton Aquatic Centre — March 1997
East Busselton Primary School — October 1997
Dalyellup — May, July and October 1999, April and November 2000, July 2004
Busselton School site abutting Aquatic (Recreation) Centre — June-July 2001
Novacare — September 2001, January, March and June 2004
Cape View, Little Colin Street — January 2004 and July 2007

CapeCare / Ray Village — November 2004 and November 2006
National Lifestyle Villages — November 2005.

(4) The following is a list of developments and numbers of western ringtail possums translocated:

Port Geographe — 49
Busselton Aquatic Centre — 14
East Busselton Primary School — 15
Dalyellup — 57
Busselton School site abutting Aquatic (Recreation) Centre — 11
Novacare — 67
Cape View, Little Colin Street — 47
CapeCare / Ray Village — 56
National Lifestyle Villages — 19.

(5) Yalgorup National Park and Leschenault Peninsula Conservation Park.

(6) These details are not readily available. A comprehensive search of Department of Environment and Conservation (DEC) files over the past 14 years would be required to answer this question.

(7) Standard morphometric data are recorded at the time of capture for all translocated western ringtail possums, i.e. weight, sex, head length, head-body and tail length, pouch condition (examined for evidence of current, recent and previous breeding and assessed to determine if pouch young are present and if so, the sex of the pouch young), testes size and an assessment of body condition. Translocated western ringtail possums subsequently re-caught are re-examined and the above data are re-recorded.

Since 2006 samples as part of general health screening have been collected for haematology, serum biochemistry, urinalysis, cloacal microbiology (including screening for salmonella), faecal parasitology, and ectoparasite identification.

Swabs have also been taken for chlamydia screening and serum has been collected for toxoplasmosis, leptospirosis and cryptococcosis.

For radio-collared translocated western ringtail possums, survivorship, habitat use (use of tree hollows, construction and use of dreys, diurnal rest site use and nocturnal foraging patterns), home range size and overlap, dispersal patterns and habitat partitioning with the common brushtail possum are recorded post release.

Spotlighting is carried out to assess population size and presence of recruits to the population.

(8) These details are not readily available. A comprehensive search of DEC files over the past 14 years would be required to answer this question.

(9) The DEC scientist responsible is Paul de Tores.

(10) A subset of radio-collared western ringtail possum from all translocations has been monitored.

(11) 159.

(12) (a) Monitoring at the translocation release sites has been from immediately post release until funds from developers were exhausted. For those western ringtail possums translocated post 1996, monitoring has continued as a result of funds from an Australian Research Council Linkage Grant awarded to DEC and Murdoch University.

(b) The length of time of survival for each translocated western ringtail possum varies from a few days up to six years. Causes of death have included predation by foxes, cats, pythons, chuditch and raptors, high parasite burden, gastritis and toxoplasmosis.

However, the survival time for individual animals does not give an accurate measure of the population's survival. An individual that succumbs to predation after several years, for example, may have produced offspring. This means there could be a net increase in the population despite that individual's death.

Based on the methodology most widely accepted in the scientific literature, DEC assesses translocation survivorship for the western ringtail possum by using a modelling approach combined with spotlighting data, records of recruits to the population, habitat use, the condition of recaptured possums post-release, the extent of breeding, the sex ratio of young, dispersal patterns, habitat partitioning with the common brushtail possum Trichosurus vulpecula, and the extent to which introduced and native predators actively seek the western ringtail possum as prey.

DEC research has shown the survival rate of the translocated populations is comparable to survivorship in naturally occurring western ringtail possum populations. The only site where translocation success is equivocal is Leschenault Peninsula Conservation Park, where predation by feral cats and carpet pythons appears to be limiting translocation success. This phenomenon, known as mesopredator release (i.e. an increase in subordinate predators such as cats and pythons in response to a reduction in the dominant predator, foxes) is now being addressed.

(13) These details are not readily available. A comprehensive search of DEC files over the past 14 years would be required to answer this question.

(14) Translocation has been successful, with some qualification at Leschenault Peninsula Conservation Park (see the answer to 12(b)).

Translocation in response to developments is part of balancing biodiversity conservation needs with urban and other development.

(15) Yes. [See paper 4131.] Peer reviewed scientific journal articles are currently in preparation.

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(16) Not applicable.