

NSW National Parks and Wildlife Service

Biodiversity Management Unit, PO Box 1967, Hurstville, NSW, 2220

Telephone: 02 9585 6540 Fax: 02 9585 6401

Email: wildlife.licensing@npws.nsw.gov.au

ABN 30 841 387 271



**APPLICATION FOR A SCIENTIFIC LICENCE FOR THE
PURPOSE OF SCIENCE, EDUCATION OR CONSERVATION**

**National Parks and Wildlife Act 1974
Section 132C**

Version: January 2003

This box is for office use only

Application ID Number:

NOTES FOR GUIDANCE Please read the following notes carefully before completing this form.

1. This application form is for people wishing to take action for scientific, educational or conservation purposes, that is likely to result in one or more of the following:
 - (a) harm to any protected fauna, or to an animal that is of, or is part of, a threatened species, an endangered population or an endangered ecological community,
 - (b) the picking of any protected native plant or of any plant that is of, or is part of, a threatened species, an endangered population or an endangered ecological community,
 - (c) damage to critical habitat,
 - (d) damage to a habitat of a threatened species, an endangered population or an endangered ecological community.
2. 'Harm' an animal is defined in Section 5 of the *National Parks and Wildlife Act 1974* (NPW Act) and includes hunt, shoot, poison, net, snare, spear, pursue, capture, trap, injure or kill. 'Pick' a native plant is defined in Section 5 of the NPW Act and means gather, pluck, cut, pull up, destroy, poison, take, dig up, remove or injure the plant or any part of the plant.
3. All sections of the application form must be completed in full unless otherwise stated. Failure to provide adequate information may delay the processing of your application. Please allow 4-6 weeks for your application to be processed.
4. If insufficient space is available to answer any question(s) please attach a signed and dated statement.
5. A \$30 license application fee must accompany a license application. A \$10 fee applies for each additional person to be authorised under this license.
6. Licenses are issued under section 132C of the *National Parks and Wildlife Act 1974* (NPW Act) and may be issued subject to conditions.
7. It is a condition of any license issued that a full report of the actual work carried out under license be submitted to the NSW National Parks and Wildlife Service (NPWS) within two weeks of the expiry date of the license.
8. Licenses are normally issued for a one year period. A request to vary the original terms of the license must be submitted in writing to the NPWS.
9. Applicants should note that a license from the NPWS does not authorise access or power of entry onto any land. Consent from the property owner must be obtained prior to entry onto their land.
10. Details of licences issued, including names and addresses of licensees, will be stored and processed on a computer database. This information will be used by the NPWS solely to undertake licensing functions. To do this the NPWS may need to discuss applications with third parties or disclose information about licensing decisions. In such cases, the NPWS will operate within the bounds of the *Privacy and Personal Information Protection Act 1998*.
11. An applicant who is undertaking work on animals may also have obligations under the *Animal Research Act 1985*. Applicants should contact the Animal Welfare Unit, NSW Agriculture on 02 6391 3324 for further information.
12. The NPWS may issue guidelines for the carrying out of certain actions that require a license. Applicants will be required to follow any such guidelines that apply to their proposed action.

PART A Personal Details and Experience

1. Full name of applicant: (Mr/Mrs/Ms/Miss/Dr/other) Peter Clarke Date of Birth _____
2. Name of Organization/ Institution (if applicable) Ku-ring-gai Council
 Position held within the Organization/ Institution Bushcare Officer
3. Address _____
 _____ Postcode _____
 Phone (work) _____ (mobile) 0418277099
4. Fax _____ Email clarkep@kmc.nsw.gov.au
5. Have you held a license issued by the NPWS within the last 3 years?
 YES / NO If yes, please list licence numbers Yes "Atlas of NSW Wildlife Databases" LGA014
6. If the proposed licensee is an individual, please state their relevant qualifications and experience.

If the proposed licensee is a group (company, partnership or association) or will involve other persons whom you wish to act under this authority, please state the name, date of birth and relevant qualifications and experience of each officer or employee of the group who will carry out the actions.

NAME (IN FULL), AND DATE OF BIRTH	RELEVANT QUALIFICATIONS AND EXPERIENCE
Gerry Swan	Consultant Herpetologist
Members of the Herpetologist Society	Various
Peter Clarke	BA Communication, Horticulture Certificate, Bush Regeneration Certificate.

7. Please provide the names, addresses and contact details for two referees who are familiar with your work. The NPWS may contact these referees to verify the statements you have provided.

- Nancy Pallin _____
- Gerry Swan _____

PART B Details of proposal

8. Please nominate the purpose of your work (more than one box may be ticked).

- Science (including field surveys for environmental assessment purposes)
- Conservation
 - Education

9. Please indicate whether the proposed action is likely to result in one or more of the following [please tick the relevant box(es)].

- Harm to any protected fauna, or to an animal that is of, or is part of, a threatened species, an endangered population or an endangered ecological community
- Picking of any protected native plant or of any plant that is of, or is part of, a threatened species, an endangered population or an endangered ecological community
- Damage to habitat of a threatened species, endangered population or endangered ecological community
- Damage to critical habitat

10. Please indicate whether the proposed action involves the following activities (please tick relevant box).

- Bird banding Bat banding Not applicable

11. Describe the action, including the objectives, of your work and the equipment and methodology proposed to be used. Please state whether the action involves the translocation, propagation, introduction, re-introduction or moving of a species in any way, specifying the species involved.

Objective:

To set up a new program called Faunafriends to undertake a species recovery program for *Tiliqua scincoides* within the Ku-ring-gai municipality. This is to be achieved by translocating offspring produced by a captive-breeding program, to carefully selected sites. The aim is to secure the status and viability of the Ku-ring-gai municipalities *Tiliqua scincoides* population.

Intended Goals:

- To supplement the existing population of *Tiliqua scincoides* in the Ku-ring-gai municipality:

To achieve this outcome, a captive breeding program will be set up and run by Gerry Swan, Australian Herpetologist members and Faunafriends at the Wildflower Garden St Ives, owned and managed by Ku-ring-gai Council.

The Sydney Metropolitan Wildlife Service (SMWS), WIRES and Herpetologists will provide *Tiliqua*, obtained from the North Shore, to create the source population. The resulting *Tiliqua* offspring will be released on sites within the municipality.

- Educational:

Host Environment Convenors (recipients of the translocated *Tiliqua*) would be required to join a Council run program 'Backyard Buddies'. This would involve attending a Faunafriends Workshop and having a suitable host environment.

- The time frame for this program is dictated by the success of the captive-breeding program.

Co-ordinating Program

- On site, *Tiliqua* will be kept in an **enclosure** made to the expert's guidelines.

Guidelines: 3mx3m enclosure. Plastic sides 1meter high, 10cm sunk into the ground

Shelter consists of hollow logs/PVC pipe/Sandstone with hollows. Shade. Water

Maintenance: Feeding and caring for the *Tiliqua sp.* will be carried out by members of the Australian Herpetologist Society, Gerry Swan and Faunafriends staff. Gerry Swan will be Ku-ring-gai Council's contact with the Herpetologists

- Selecting **suitable sites** for translocated *Tiliqua*. Residents who join the program will be screened and a checklist (as follows) will be followed before a release occurs.

Checklist for potential release sites

Habitat
No cats
No dogs
Disused and un-kept areas are essential (eg. Overgrown woodpiles).
No snail pellets
Suitable shelter - artificial hard cover shelters such as: drainage pipes, sheds, concrete crevices - rocky outcrops or piles of rocks
Compost heap (good but not essential).
Ground covers
Large leafed vegetation
No main highway
No existing blue-tongue population
Suitable sunny spot
Food
Snails
Caterpillars
Insects
Vegetation

Properties adjacent to release sites will be targeted as part of an education campaign to raise awareness of the Faunafriends program and of the specific requirements of these lizards. The education program will help insure the success of the project and assist with the long-term survival of this species in the Ku-ring-gai area.

Residents that participate in *Tiliqua* releases will be asked to provide regular reports on sightings and observed behaviour of *Tiliqua*.

The scientific basis for our Scientific License proposal has been provided in a paper:

The ecology of an Australian Reptile icon: how do blue-tongued lizards (*Tiliqua scincoides*) survive in suburbia? ¹

“Blue-tongue lizards actively utilize the human modified habitats of suburbia, rather than remnant patches of less disturbed areas.” P224

“Our study indicates that blue-tongue lizards move about within discrete “home ranges”; all of the telemetered animals remained relatively close to their initial capture locations.” P224

Blue-tongues “are able to utilize highly artificial garden habitats. In fact they show a preference for these areas over the more natural forest habitat.” P 225

“The introduced snail *Helix aspersa* plays an important role in the diet of suburban blue-tongue lizards. The lizards ability to exploit commensal prey items in suburban gardens may be one of the reasons why they spend more time in garden habitats (where they have access to increased food resources) than in less highly disturbed areas.” P225

In the data collected by this paper, regarding the different mortality rates of different components of the population, it showed that adult males were vulnerable during the spring mating season, however it is believed that this has a minor impact on the viability of the population. “However the data showed another, more worrying, peak of mortality in summer, this time involving the mortality of newborn lizards.

Without significant recruitment of juveniles into the system each year, the population would see a gradual decline as older lizards die.

Nevertheless this may be a very long process as captive lizards can live for more than 30 years (P. Harlow, personal communication).” P226

¹ **The ecology of an Australian Reptile icon: how do blue-tongued lizards (*Tiliqua scincoides*) survive in suburbia? Koenig, Shine and Shea**

1 Please provide details about the protected fauna, protected native plants, threatened species, endangered populations or endangered ecological communities to be affected by the proposed action.

SCIENTIFIC NAME	COMMON NAME	NSW CONSERVATION STATUS (PROTECTED, VULNERABLE, ENDANGERED)	ESTIMATED NO. OF INDIVIDUALS OR PROPORTION AND TYPE OF PLANT MATERIAL THAT WILL BE AFFECTED BY THE ACTION
<i>Tiliqua scincoides</i>	Blue Tongue	Protected	Approx. 10 <i>Tiliqua scincoides</i>

12. If the proposed action is likely to damage the habitat of a threatened species, endangered population or endangered ecological community (including critical habitat), please specify the amount of habitat to be affected. _____ (ha)

13. Please state the duration of the action. From: July 2003 To: ongoing

14. Please state the location(s) and land tenure where the proposed action will occur.

Ku-ring-gai municipality, breeding to take place within a gated enclosure at Ku-ring-gai Wild Flower Garden, Mona Vale Road St.Ives.

15. If the action is to be carried out on land managed by the NPWS, please outline why NPWS managed land has been chosen over alternate locations.

16. What are the likely short- and long-term impacts of the proposed action?

Arrest *Tiliqua scincoides* population decline.

Raise community awareness of urban wildlife issues.

Involve a broad, cross section of the community in raising awareness of *Tiliqua*. Recruit members of the public into "Faunafriends"

It is acknowledged that some of the translocated *Tiliqua* may perish. However it is known that wildlife, after being rescued and nursed back to health, incur a high mortality on release. Faunafriends plan to minimise this problem and will maximise the potential for the survival of the translocated lizards, with education and on going monitoring.

17. Please describe what measures will be taken to minimise the effect(s) of the action.

Tiliqua habitat at KWG will be built and managed by Ku-ring-gai Council, with professional input from the local Herpetologists to ensure the safety and well being of the blue-tongue lizards. Education campaigns will inform the community as to how best co-exist with this native lizard.

Some issues raised to date:

Care to remove the pregnant female prior to giving birth to reduce the young ones being eaten by their own kind.

Release the young as soon as possible to ensure a wild species as opposed to a captive one.

18. If the action is for scientific or conservation purposes and will affect a threatened species, endangered population or endangered ecological community, please describe how the activity will contribute to the conservation of the relevant species, population or ecological community.

N/a

19. If plant material is to be removed from the site, please describe the proposed arrangements for deposition of the material (for example, specimens will be forwarded to a herbarium, institution).

N/a

20. If animals are to be removed from the site of capture, please describe where they are to be taken arrangements for keeping/ housing the animals and for how long. If animals will be subsequently released, please describe procedures for release, including where and when the release is to take place.

As previously stated, the *Tiliqua* will be kept within a locked compound, in a suitable enclosure at the Wildflower Garden. We will require *Tiliqua*, prior to the appropriate time for breeding, (Spring) through to birth in December. Once the breeding season is over, *Tiliqua*, surplus to requirements will be released to suitable sites within the municipality. To ensure genetic variability it will be necessary to continually replace breeding "stock", however it is understood that *Tiliqua* adapt well to a captive environment and under good conditions can live up to 30 years in captivity. (This is not our intention)

PART C Declaration

- I have read and understood the notes for guidance on this form.
- I understand that failure to comply with any conditions attached to a license granted in respect of this application may constitute an offence.
- I declare that all information provided by me in this application is true and correct to the best of my knowledge and belief.

Note: It is an offence carrying a maximum penalty of \$3300 to make any statement or provide any information or other material in an application for a license or certificate that the applicant knows, or ought reasonably to know, is false or misleading.

Signature of Applicant

Date