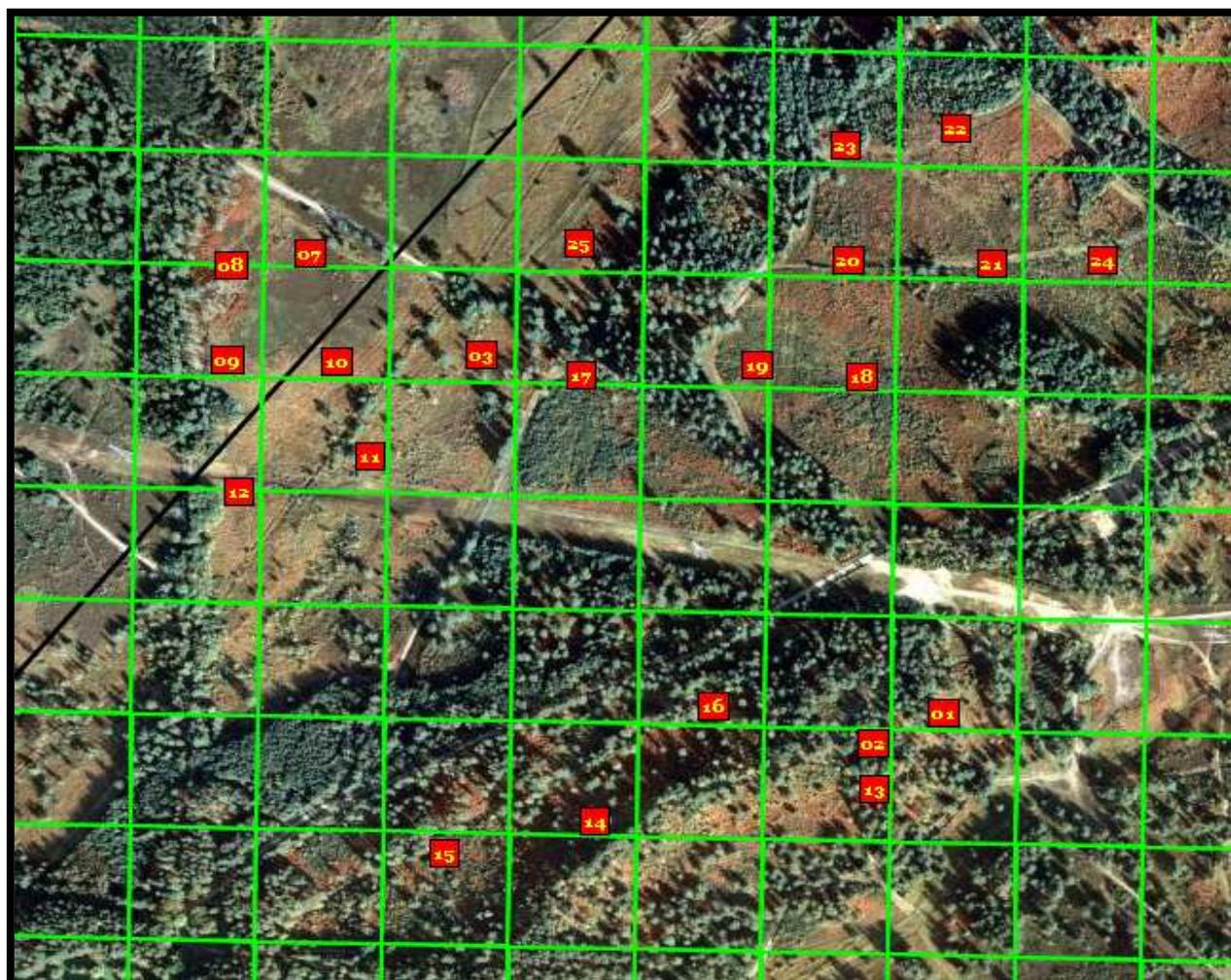




Land Manager's Guide to SARG Reptile Survey



Steve Langham

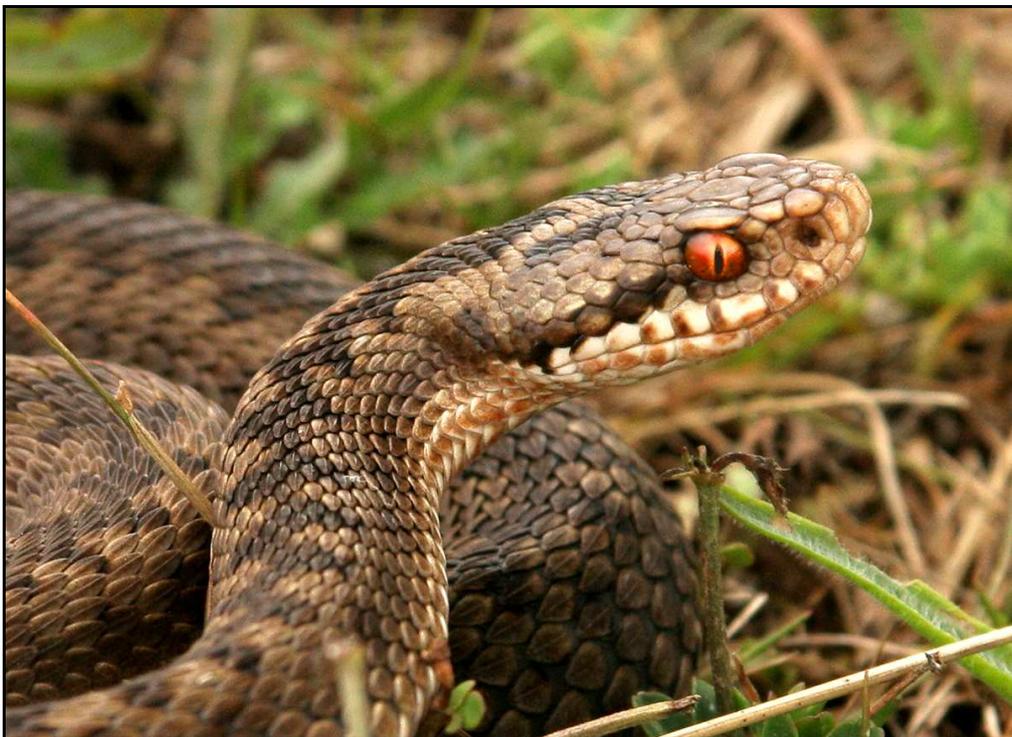
Land Manager's Guide to SARG Reptile Survey

1. Introduction

- 1.1. This guide describes how SARG works with land managers to provide them with the reptile species information that they need to inform habitat management plans.
- 1.2. SARG has successfully set up more than 60 long term survey and monitoring sites across the Weald, working closely with land managers such as Surrey Wildlife Trust, Borough Councils, The National Trust and the Amphibian and Reptile Conservation Trust.
- 1.3. This guide will use the terms *refuge* and *tin* as synonyms. These are corrugated steel sheets, approximately 3-feet by 2-feet that are used to enhance reptile detectability.

2. Land Manager Permissions

- 2.1. SARG never establishes reptile survey infrastructure without explicit permission from the land owner or land manager.



Female adder © Steve Langham 2005

3. Reptile Survey Planning

- 3.1. Once permission to lay refugia (corrugated iron tins) has been agreed in principle, the SARG Reptiles Officer will liaise with the land manager to establish the extent of the prospective survey site.
- 3.2. SARG will then draw up a draft refugia plan, with the approximate locations for each tin (as per the figure on the cover of this guide). This will be within the area agreed with the land manager, and will be planned using interactive aerial photography to ensure that refugia (tins) are located in habitat suitable for reptile occupancy. The standard for long-term reptile survey and monitoring is one refuge per hectare, covering no more than 30 hectares.
- 3.3. This draft plan will be sent to the Land Manager, to ensure that sensitive areas of the site are excluded from the reptile survey (E.g. known Nightjar nesting sites).
- 3.4. Once the draft laydown has been agreed, it is usual to arrange a site visit, to walk the ground, to ensure that the micro-habitat is suitable for reptile survey, to ensure that we fully understand site sensitivities, and to start building up a relationship with the Land Manager.
- 3.5. Once the Land Manager and SARG are agreed with the laydown plan, SARG will discuss access arrangements and a suitable date to lay the refugia.

4. Surveying Grazed Sites

- 4.1. Using refugia to survey for reptiles on grazed sites can raise concerns for the safety of reptiles which risk being injured, should the tin be trampled by livestock. There could also be concerns over the metal edges of the refugia harming the livestock, although this is not known to have occurred.
- 4.2. As a guide, we would prefer to only use refugia on grazed sites of less than 0.2 LU/Ha at maximum instantaneous grazing pressure. This is not an annual average figure.
- 4.3. Even on grazed sites, there are measures that can be taken to safely use refugia. One example is to remove tins from grazed compartments; another is to provide protection for the tin as in the figure below. This second approach should only be used at sites with very low public pressure, as it can draw attention to the refuge location.



Protecting a refuge from grazing animals by use of a dummy electric fence © Jamel Guenioui

5. Laying the tins

- 5.1. Site access is preferred to be by Land Rover, but where this is not possible, a hand cart may be used to transport the refugia.
- 5.2. Refuges are laid in suitable micro-habitat, no closer than 10 metres from the closest footpath and always out of sight from paths.
- 5.3. Each tin has an identifying label attached stating that the tin is for *Ecological Survey*, and a request not to touch. Each tin label has a unique ID code and a contact email address. Labels are attached to the tin by means of a single cable-tie, which doubles as a lifting handle for the refuge as a safety measure against accidental adder bite. A 1 metre precision (10-digit OSGB36 datum) GPS grid reference is recorded for each tin.
- 5.4. Once the refugia laydown is complete, the list of coordinates, a GIS file and an aerial picture showing their locations is provided to the Land Manager.

6. Surveys

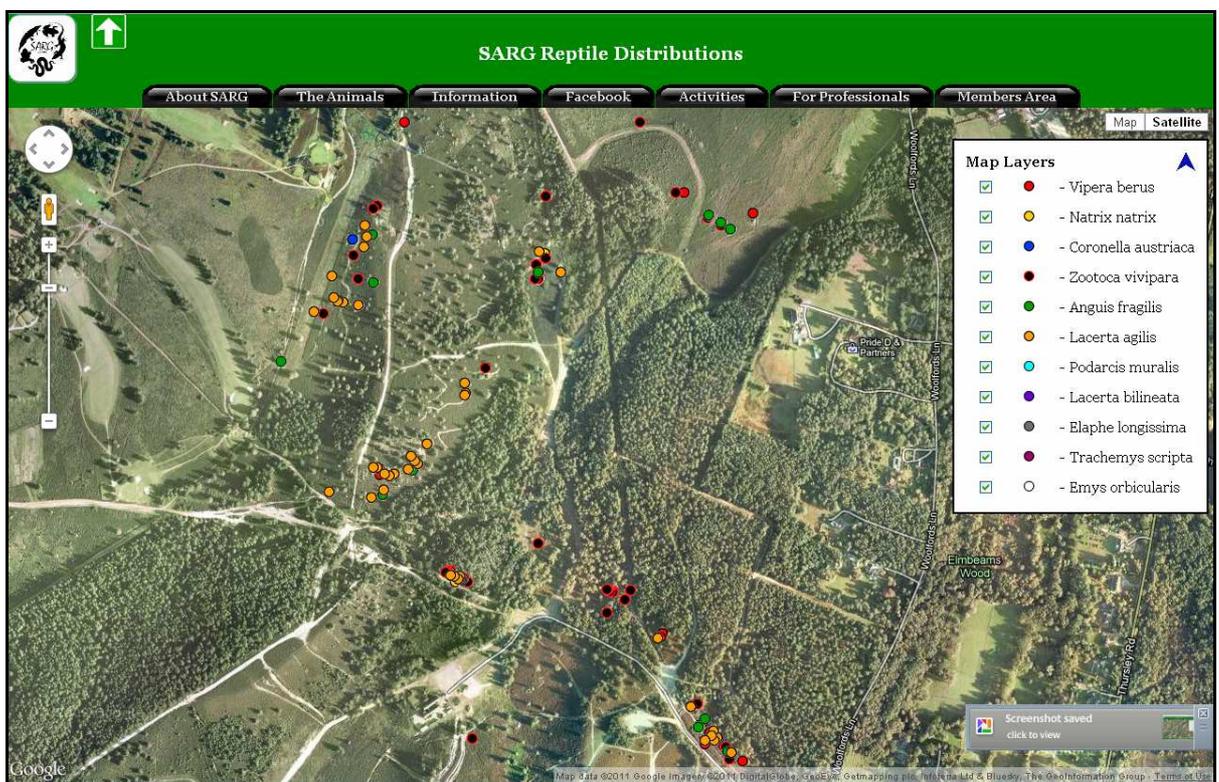
- 6.1. All surveyors will be trained by SARG and insured via the ARG-UK indemnity scheme. Surveyors will carry a SARG Surveyor ID card, and will be appropriately licensed if European Protected Species are present at the site.
- 6.2. There is a strict limit to the maximum number of surveys at each site. No more than 10 surveys are to be conducted in any year. This is to minimise disturbance to the animals and to prevent damage to the habitat. Currently, due to the limited number of surveyors, we achieve around 5 visits per site per annum.
- 6.3. It is normally impossible to warn Land Managers in advance of a particular reptile survey, as such surveys are extremely weather dependent, and the decision to survey may well be made on the day of the survey.
- 6.4. Local volunteers are welcome to take part in the reptile survey, however; they must have received reptile survey training from SARG and have to have signed a SARG volunteer workers agreement.



Example SARG ID Card – carried by all surveyors

7. Access to Survey Data

- 7.1. Detailed survey results will be available on request, however; SARG has better means for displaying the survey data.
- 7.2. Land Managers have the choice of logging into the SARG website to view interactive distribution mapping of survey results, or we can issue a unique URL that will display the same map, and can be stored as a 'favourite bookmark' without the need to log in.
- 7.3. Data can be supplied to Land Managers in a variety of formats, from MS Excel spreadsheets to bespoke GIS files, such as KML, GML or Shapefiles.



Example of Land Manager online GIS via the SARG website – this map has pan and zoom functionality

8. Contact

Should you wish to learn more about SARG reptile survey, please contact the SARG Reptiles Officer, Jamel Guenioui at reptiles@surrey-arg.org.uk.