

New records of smooth newt (*Lissotriton vulgaris*) in Lanarkshire

Erik Paterson

205 Telford Road, East Kilbride, South Lanarkshire,
G75 0DG

E-mail: erikpaterson@virginmedia.com

During 2013, surveys were undertaken of ponds throughout the South Lanarkshire town of East Kilbride for the presence or likely absence of amphibians. A total of 21 ponds were selected using the criteria given by the Freshwater Habitats Trust (undated: see References) and surveyed during the months of April and May in the evenings by torchlight. The species detected during these survey visits at each site are given in Table 1 and the OS coordinates of the ponds are listed in Table 2. Of these 21 ponds, two were found to contain smooth newts. The NBN (National Biodiversity Network) Gateway lists smooth newts as occurring within East Kilbride area at 10 km resolution but offers no records at higher resolution within a 3 km buffer of the town. A request for amphibian records from Glasgow Museums Biological Records Centre and South Lanarkshire Council yielded no additional records of this species within the official boundary of the town with a 3 km buffer.

On the evening of 10th April 2013 the so-called "Fire Pond" at Calderglen Country Park (Fig. 1) off the A726 (NS 65413 52864) was surveyed by torchlight and net from approximately 22:00 until 23:00. One male smooth newt was found during the survey and an estimated 170 clumps of common frog (*Rana temporaria*) spawn using the methods given by Griffiths et al. (1996) with 13 adults alongside 10 adult common toads (*Bufo bufo*). This site was surveyed only once. The Fire Pond is circular and approximately 400 m² in area. The pond is reportedly deep (pers. comm. South Lanarkshire Council Ranger Service, April 10th, 2013) and infrequently cleaned out. The pond is man-made and steep-sided with old bricks; it is fenced off and public access to it is restricted. The site had approximately 80% macrophyte cover when surveyed, including both submerged and emergent vegetation. No fish were noted and waterfowl presence was restricted to one or two mallard ducks (*Anas platyrhynchos*). The terrestrial habitat is moderate in quality but restricted in area, as the immediate vicinity of the

pond offers foraging opportunity and minor hibernation opportunity for amphibians, with barriers to dispersal including amenity grassland, public access paths and a football pitch. The water was clear and its quality appeared good in view of the abundance and diversity of the aquatic invertebrates that were present.

The second pond I call GSO (Glasgow Southern Orbital) Business Park SUDS (Sustainable Urban Drainage System) (Fig. 2), a man made SUDS pond at the side of the A727 (NS 60085 55429). On the early morning of 23rd April, four adult male smooth newts in full breeding form with obvious large black spots, lobed toes on the hind feet and smoothly undulating crest from the rear of the head continuing along the vertebrae and on to the tail (Smith, 1951; Inns, 2009; Beebee, 2013) were noted by torchlight. In addition, four male and one female palmate newt (*Lissotriton helveticus*), five small unidentified female newts (*Lissotriton sp.*), and one clump of common frog spawn were noted. The site was surveyed again on 5th May when a male and female smooth newt were noted alongside 21 palmate newts and eight unidentified female small newts. The pond is roughly elliptic and approximately 350 m² in area with two culverts, one running in from drains at the nearby GSO Business Park and one running out into a small burn leading to Kittoch Water. There was little macrophyte cover apart from emergent vegetation at the pond's edge. No fish were noted and no waterfowl were seen. The terrestrial habitat is moderate in both quality and area with good opportunity for foraging and hibernation by amphibians, but subject to disturbance from local development, as new industrial units are due to be built and associated machinery accesses the area in this regard. The water was clear and, from the number of damselfly larvae present, it would be reasonable to assume of good quality.

These sites are at opposite ends of East Kilbride with no linking habitat and at each site there are two other ponds within 1 km. The two closest to Calderglen Fire Pond were also surveyed and no smooth newts were found. Those closest to GSO Business Park SUDS were not within the 2013 survey area.

Table 1. Numbers of amphibians detected in East Kilbride ponds in 2013 (data from Paterson, 2013). The numbers are peak counts of each species found in each of the 21 ponds surveyed during the 2013 season. Ponds are given in order from West to East. For the common frog, unless stated otherwise, the values are the number of spawn clumps; for all other species they are peak head counts by torchlight. Abbreviations of pond names are explained in Table 2. ad = adults.

Pond	common frog	common toad	palmete newt	smooth newt	small newt (Unid.)
TRS	50	29	0	0	1
PRS	17	26	0	0	0
OP	1	42	0	0	0
DP	0	0	0	0	0
GBS	1	0	21	4	8
PPP	60	4	4	0	0
HW	41	0	9	0	9
LRS	97	119	0	0	0
HL	155	20	0	0	0
LWP	65	64	0	0	0
CP	50	16	1	0	2
LGP	2(ad)	14	0	0	0
AS	173	0	0	0	0
BQS	0	0	0	0	0
GRS	3	0	0	0	0
SSP	9	0	0	0	0
CDP	25	2	0	0	0
CFP	170	10	0	1	0
CWP	9	0	1	0	0
FP	55	0	1	0	4
CRP	16	12	4	0	7

Greenhills Road Sub Station	NS 64226 51942
Sainsbury's Small Pond	NS 64272 51503
Calderglen Park Old Duck Pond	NS 65251 52642
Calderglen Park Fire Pond	NS 65413 52864
Calderglen Wildlife Pond	NS 65514 52657
Fred's Pond, Calderglen Country Park	NS 65847 54715
Calderside Road Disused Pit	NS 66761 55257



Fig. 1. Calderglen Fire Pond, Calderglen Country Park, East Kilbride.

Table 2. Locations of ponds given as Ordnance Survey coordinates.

Pond	Coordinates
Thornton Road SUDS	NS 59444 54170
Peel Road SUDS	NS 59492 63976
Ocein Pond, Ocein Drive	NS 59546 53473
Disraeli Pond, Disraeli Way	NS 59766 53659
GSO Business Park SUDS	NS 60085 55429
Peel Park Pond, Redwood Drive	NS 60427 54956
Hairmyres Woods	NS 60495 54470
Lindsayfield Road SUDS	NS 60680 51918
Heritage Loch, Stewartfield Way	NS 62637 55773
Langlands West Pond, Greenhills Road	NS 62923 51727
Crosshill Pond, Auldhouse Road	NS 62976 51061
Langlands Golf Course Pond	NS 63319 50876
Amphibian Site, Hurlawcrooks Road	NS 63903 60984
B&Q SUDS, Mavor Avenue	NS 64175 56228

No other sites with smooth newt records are known within 3km of the town's boundary and no verifiable or precise records can be found for this region. Each pond is located close to a site at which development has recently taken place (GSO Business Park and K-Park Training Academy, Calderglen). K-Park Training Academy received some negative attention from the local newspaper during construction when old beech trees were removed to make way for football pitches. It is common knowledge within the town that K-Park was not universally well received with letters of complaint being issued by individuals who use Calderglen Country Park in which K-Park was built for dog walking and other outdoor pursuits. On this account, I tentatively speculate that there is a small possibility that smooth newts have been introduced at these sites by local individuals who, having seen the orange bellies of the males coupled with a crest, assumed that they were handling protected great crested newts (*Triturus cristatus*) and introduced them at these sites. This is a tentative and highly speculative proposal and further, more comprehensive survey effort is required in the local area to determine the true extent of the spread of the smooth newt before any further conclusions can be made.

I would like to acknowledge field work assistance from Louisa Maddison, Chris Cathrine and Peter Minting, in addition to formatting and mapping support from Chris Cathrine.



Fig. 2. GSO Business Park SUDS, East Kilbride.

REFERENCES

- Beebee, T.J.C. (2013). Amphibians and Reptiles. Naturalists' Handbooks 31. Pelagic Publishing, Exeter.
- Freshwater Habitats Trust. Ponds. Freshwater Habitats Trust, Oxford. Retrieved from: <http://www.freshwaterhabitats.org.uk/habitats/pond/>
- Griffiths, R.A., Raper, S.J., & Brady, L.D. (1996). Evaluation of a standard method for surveying common frogs (*Rana temporaria*) and newts (*Triturus cristatus*, *T. helveticus* and *T. vulgaris*). JNCC Report No. 259. Joint Nature Conservation Committee, Peterborough.
- Inns, H. (2009). Britain's Reptiles and Amphibians. WildGuides Ltd., Hampshire.
- Paterson, E. (2013) East Kilbride Amphibian Survey 2013. Erik Paterson, East Kilbride. (Unpublished).
- Smith, M.A. (1951). The British Amphibians & Reptiles. Collins New Naturalist 20. Collins, London.