European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC)

Supporting documentation for the Third Report by the United Kingdom under Article 17

on the implementation of the Directive
from January 2007 to December 2012
Conservation status assessment for

Species:

S1207 - Pool frog (*Rana lessonae*)

IMPORTANT NOTE – PLEASE READ

- The country-level reporting information contained in this document is a contribution to the Article 17 UK report for the habitat/species concerned.
- It has been provided by **Natural England** and refers only to the state of the habitat/species in **England** - it does not constitute an assessment for the whole of the UK.
- The Article 17 UK Approach document provides details on how this information has been used and, combined with information supplied by other Statutory Nature Conservation Bodies
- The format of the document is closely aligned to that set out by the European Commission for Member State reporting – as a result, some of the fields are not applicable at a country-level and have deliberately been left blank – in addition, the content of most fields is constrained by the EC reporting categories.

Reporting format on the 'main results of the surveillance under Article 11' for Annex II, IV & V species

Field name	*Brief explanations*	
0.2 Species	**0.2.1 Species code**	**S1207**
	0.2.2 Species scientific name	***Rana lessonae***
	0.2.3 Alternative species scientific name Optional	
	0.2.4 Common name Optional	**Pool frog**

1.1 Maps			
1.1.1 Distribution map		**Sensitive**	**False**

1.1.2 Method used - map	**Complete survey/Complete survey or a statistically robust estimate**
	The sole re-introduction site has been subject to detailed monitoring every year since 2006
1.1.3 Year or period	**2006-2012**
	The sole re-introduction site has been subject to detailed monitoring every year since 2006
1.1.4 Additional distribution map	**False**

1.1.5 Range map	

2.1 Biogeographical region & marine regions	**ATL**
2.2 Published sources	**"BEEBEE, T.J.C. & GRIFFITHS, R.A. 2000. Amphibians and Reptiles: A Natural History of the British Herpetofauna. The New Naturalist series. HarperCollins, London.** **BEEBEE, T.J.C., BUCKLEY, J., EVANS, I., FOSTER, J.P., GENT, A.H., GLEED-OWEN, C.P., KELLY, G., ROWE, G., SNELL, C., WYCHERLEY, J. & ZEISSET, I. 2005. Neglected native or undesirable alien? Resolution of a conservation dilemma concerning the pool frog Rana lessonae. Biodiversity and Conservation 14: 1607–1626.** **BUCKLEY, J. & FOSTER, J. 2005. Re-introduction strategy for the pool frog Rana lessonae in England. English Nature Research Report No. 642. English Nature, Peterborough.** **EUROPEAN HABITATS FORUM. 2006. Towards European Biodiversity Monitoring. Assessment, monitoring and reporting of conservation status of European habitats and species. Wien, Cambridge, Bruxelles.** **FOSTER, J. & BUCKLEY, J. 2006. Report on the second release in the reintroduction of the pool frog Rana lessonae to England, May-June 2006. Unpublished Report to Natural England Wildlife Licensing Unit. October 2006.** **KUZMIN, S., BEEBEE, T., ANDREONE, F., NYSTRÖM, P., ANTHONY, B., SCHMIDT, B., OGRODOWCZYK, A., OGIELSKA, M., COGALNICEANU, D., KOVÁCS, T., KISS, I., PUKY, M. & VÖRÖS, J. 2004. Rana lessonae. In: IUCN 2006. 2006 IUCN Red List of Threatened Species. Www.iucnredlist.org/search/details.php/58643/all** **WILLIAMS, C. & GRIFFITHS, R.A. 2004. A population viability analysis for the reintroduction of the pool frog (Rane lessonae) in Britain. English Nature Research Report No. 585, English Nature, Peterborough.** **The Amphibian & Reptile Conservation Trust: Rare Species Database and Reptile and Amphibian Dataset (provided via the NBN Gateway)"**

2.3 Range

2.3.1 Surface area Range	**100**	
	The pool frog is still present at one site in England so the range estimate remains the same as in 2007	
2.3.2 Method used Surface area of Range	**Complete survey/Complete survey or a statistically robust estimate**	
	The range surface area of 100 sq.km assumes a resolution of 10km, although the area actually occupied by the frogs is considerably smaller than this	
2.3.3 Short-term trend Period	**2007-2012**	
	The trend period represents six full years years after the initial re-introduction	
2.3.4 Short term trend Trend direction	**stable**	
	The frogs have not spread appreciably from their initial re-introduction site and the area of range has not changed during this period. However, up to 20 further re-introductions are planned, the first possibly taking place in 2014, which will increase the range in England	
2.3.5 Short-term trend Magnitude	**a) Minimum**	
	b) Maximum	
2.3.6 Long-term trend Period	**2007-2012**	
	This period is the same as the short-term trend and represents the six years since the initial re-introduction	
2.3.7 Long-term trend Trend direction	**stable**	
	As for 2.3.4.	
2.3.8 Long-term trend Magnitude Optional	**a) Minimum**	
	b) Maximum	
2.3.9 Favourable reference range	**a) Value in km²**	
	b) Operator for FRR	
	c) FRR is unknown (indicated by "true")	**True**

	Up to 20 further re-introductions are proposed, with the next one possibly taking place in 2014. However, a detailed analysis of the entire potential (and hence favourable) range in England has not been conducted to date	
	d) Method used to set FRR	
2.3.10 Reason for change Is the difference between the reported value in 2.3.1 and the previous reporting round mainly due to…	**a) Genuine change?**	**False**
	b) Improved knowledge/more accurate data?	**False**
	c) Use of different method (e.g. "Range tool")?	**False**

2.4 Population		
2.4.1 Population size estimation (using individuals or agreed exceptions where possible)	**a) Unit**	**number of individuals**
	Latest monitoring has estimated the number of pool frogs in 2012 to be around 53 adults	
	b) Minimum	**50**
	c) Maximum	**60**
2.4.2 Population size estimation (using population unit other than individuals) Optional *(if 2.4.1 filled in)*	**a) Unit**	
	b) Minimum	
	c) Maximum	
2.4.3 Additional information on population estimates / conversion Optional	**a) Definition of "locality"**	
	b) Method to convert data	
	c) Problems	

	encountered to provide population size estimation	
2.4.4 Year or period	**2012-**	
	2012 represents the latest population estimate for the re-introduction site	
2.4.5 Method used Population size	**Complete survey/Complete survey or a statistically robust estimate**	
	Detailed population monitoring has been carried out every year from 2007-2012	
2.4.6 Short-term trend Period	**2007-2012**	
	This trend period represents six full years years after the initial re-introduction	
2.4.7 Short-term trend Trend direction	**increase**	
	The population of adult frogs has increased from 40 to 53 during the period 2007-2012	
2.4.8 Short-term trend Magnitude	**a) Minimum**	**30**
	b) Maximum	**35**
	c) Confidence interval	
2.4.9 Short-term trend Method used	**Complete survey/Complete survey or a statistically robust estimate**	
	Detailed population monitoring has been carried out every year from 2007-2012	
2.4.10 Long-term trend – Period	**2007-2012**	
	This period is the same as the short-term trend and represents the six years since the initial re-introduction	
2.4.11 Long-term trend Trend direction	**increase**	
	As for 2.4.7.	
2.4.12 Long-term trend Magnitude Optional	**a) Minimum**	**30**
	b) Maximum	**35**

	c) Confidence interval	
2.4.13 Long term trend Method used	**3**	
	Detailed population monitoring has been carried out every year from 2007-2012	
2.4.14 Favourable reference population	**a) Number of individuals/agreed exceptions/other units**	**10000**
	Assuming a minimum of 20 future re-introductions, and an eventual minimum population size of 500 adult frogs at each site, the Favourable Reference Population is 10,000 adult pool frogs in England	
	b) Operator	
	c) FRP is unknown indicated by "true"	**False**
	d) Method used to set FRP	**Initial estimate based on potential number of re-introduction sites - further detailed analysis of these sites and available habitat is required**
2.4.15 Reason for change Is the difference between the value reported at 2.4.1 or 2.4.2 and the previous reporting round mainly due to:	**a) Genuine change?**	**True**
	b) Improved knowledge/more accurate data?	**False**
	c) Use of different method (e.g. "Range tool")?	**False**

2.5 Habitat for the species	
2.5.1 Area estimation	**0.125**
	Area of current re-introduction site

2.5.2 Year or period	**2007-2012**	
	The pool frog is still present at one site in England in 2012 so the habitat estimate remains the same as in 2007	
2.5.3 Method used Habitat for the species	**Complete survey/Complete survey or a statistically robust estimate**	
	Detailed habitat monitoring has been carried out every year from 2007-2012 alongside the population monitoring	
2.5.4 Quality of the habitat	**a) Habitat quality**	**Moderate**
	Habitat quality at the pool frog re-introduction site has varied although a Higher Level Stewardship Scheme agreement has funded necessary management (such as grazing, scrub clearance and pond restoration) to prevent habitat deterioration	
	b) Assessment method	**Detailed annual surveys and habitat assessments**
	Detailed habitat monitoring has been carried out every year from 2007-2012 alongside the population monitoring	
2.5.5 Short-term trend Period	**2007-2012**	
	This trend period represents six full years years after the initial re-introduction	
2.5.6 Short-term trend Trend direction	**stable**	
	The area of habitat remains the same as in 2007	
2.5.7 Long-term trend Period	**2007-2012**	
	This period is the same as the short-term trend and represents the six years since the initial re-introduction	
2.5.8 Long-term trend Trend direction	**stable**	
	As for 2.5.6.	
2.5.9 Area of suitable habitat for the species	**a) Value in km²**	
	A detailed analysis of all suitable habitat in England has not been conducted to date	
	b) Absence of data indicated as '0'	
2.5.10 Reason for change Is the difference between the value reported at 2.5.1 and the previous reporting round mainly due to	**a) Genuine change?**	**False**
	b) Improved knowledge/more accurate data?	**False**
	c) Use of different method (e.g. "Range tool")?	**False**

2.6 Main pressures		
a) Pressure	**b) Ranking**	**c) Pollution qualifier**
	H = high importance M = medium importance L = low importance	
I02: problematic native species	H	
K02: Biocenotic evolution, succession	H	
K05: reduced fecundity/ genetic depression	H	
F03: Hunting and collection of wild animals (terrestrial)	M	
G05: Other human intrusions and disturbances	M	
K01: abiotic (slow) natural processes	M	

2.6.1 Method used – Pressures	**mainly based on expert judgement and other data**

2.7 Threats		
a) Threat	**b) Ranking**	**c) Pollution qualifier**
	H = high importance M = medium importance L = low importance	
H01: Pollution to surface waters (limnic & terrestrial, marine & brackish)	H	ANOPTX
I01: invasive non-native species	H	
J02: human induced changes in hydraulic conditions	H	
K02: Biocenotic evolution, succession	H	
K05: reduced fecundity/ genetic depression	H	
A02: modification of cultivation practices	M	
B02: Forest and Plantation management & use	M	
F03: Hunting and collection of wild animals (terrestrial)	M	

G05: Other human intrusions and disturbances	M	
H02: Pollution to groundwater (point sources and diffuse sources)	M	OTX
H04: Air pollution, air-borne pollutants	M	ANX
J03: Other ecosystem modifications	M	
K01: abiotic (slow) natural processes	M	
M01: Changes in abiotic conditions	M	
M02: Changes in biotic conditions	M	
A07: use of biocides, hormones and chemicals	L	OTX
A08: Fertilisation	L	NPX
I02: problematic native species	L	
K03: Interspecific faunal relations	L	

2.7.1 Method used – Threats	**expert opinion**

2.8 Complementary information	
2.8.1 Justification of % thresholds for trends	
2.8.2 Other relevant information	
2.8.3 Trans-boundary assessment	

2.9 Conclusions *(assessment of conservation status at end of reporting period)*

Please refer to the United Kingdom assessment for this species.

3 Natura 2000 coverage & conservation measures - Annex II species
(only applies to species listed under Annex II of the Directive)

3.1 Population

3.1.1 Population size Estimation of population size included in the SAC network	**a) Unit**	
	b) Minimum	
	c) Maximum	
3.1.2 Method used		
3.1.3 Trend of population size within the network (short-term trend)		

3.2 Conservation measures

Conservation measures taken (i.e. already being implemented) within the reporting period and provided information about their importance, location and evaluation.

3.2.1 Measure	**3.2.2 Type**					**3.2.3 Ranking** H = high importance M = medium importance L = low importance	**3.2.4 Location** where the measure is PRIMARILY applied			**3.2.5 Broad evaluation of the measure**					
	a) Legal/statutory	**b) Administrative**	**c) Contractual**	**d) Recurrent**	**e) One-off**		**a) Inside**	**b) Outside**	**c) Both inside & outside**	**a) Maintain**	**b) Enhance**	**c) Long term**	**d) No effect**	**e) Unknown**	**f) Not evaluated**