

I Protection in the Baltic region



Nature conservationists from Denmark, Latvia, Sweden and Germany are ensuring that the toad chorus will once again echo through our landscape in the Baltic region. Assisted by EU funding, a LIFE-Starter Project was initiated in 2003. This was followed by an international LIFE-Nature Conservation project in 2004, known as „Management of fire bellied toad populations in the Baltic region“. Thus, the first important steps were taken to preserve this threatened species and its natural habitat. The long-term aim is that up to 500 calling males will be established in each project site. The EU supported this project with 47 % of the project allocation of 2.3 million € emanating from the LIFE-programme of the EU Commission (www.ec.europa.eu/environment/life/index.htm).



STIFTUNG
NATURSCHUTZ
Schleswig-Holstein

I LIFE-Bombina Project: Management of fire bellied toad populations in the Baltic region

LIFE-Bombina-Project

I Summary of LIFE-Bombina Project

Title: Management of the fire bellied toad population in the Baltic region (LIFE04NAT/DE/000028)

Aim: Improvement of living conditions of the fire bellied toad population in NATURA 2000 sites

Applicant: Stiftung Naturschutz Schleswig-Holstein (10 sites)

Partners:

- Denmark (11 sites), Skov- og Naturstyrelsen, Amphi Consult/Lars Briggs, Zoo Copenhagen
- Sweden (4 sites) Nature/Claes André
- Latvia (2 sites) : Latgales Ekologiska Biedriba
- Germany: Landesamt für Landwirtschaft, Umwelt und ländliche Räume Schleswig-Holstein for genetic survey

External Cooperation: University of Potsdam, Prof. Ralph Tiedemann: Population genetics of the fire bellied toad

Financing:

- European Commission, Directorate-General – LIFE
- Stiftung Naturschutz Schleswig-Holstein and all partner organisations

Cooperation Investor:

- Germany: Klara-Samariter Stiftung, Schleswig-Holstein
- Latvia: Dabas aizsardzības pārvalde
- Denmark: town of Vordingborg, WWF Denmark

Duration: April 2004 – December 2009

I Contact and Information



STIFTUNG
NATURSCHUTZ
Schleswig-Holstein

Eschenbrook 4
D-24113 Molfsee
Tel. +49 (0) 431 - 210 90 90



Amphi Consult
Forskeparken 10
DK-5230 Odense
Tel. +45 (63 15) 71 43



Skov- og Naturstyrelsen

ZOO
COPENHAGEN

Nature
Artbevarande & Foto



www.life-bombina.de · www.stiftungsland.de · www.amphi.dk

Design: DesignContor, Eckernförde | Photos: Stiftung Naturschutz Schleswig-Holstein, Wikipedia
Text: Dietmar Ulbrich, Eckernförde | Print: Förde-Druck, Eckernförde | © 2009



Bombina bombina was so named in 1761 by the famous Swedish natural scientist Linné. This sonorous-sounding title reminds of the melodious call of this amphibian. However, such a chorus is likely to become a thing of the past in our region as this species is threatened in Europe. Thus, the fire bellied toad is particularly well guarded under European nature protection laws, the Habitats Directive. EU member states established protected areas for the fire bellied toad under NATURA 2000, a European nature conservation network (www.ec.europa.eu/environment/nature/index_en.htm).



Well camouflaged in grass



defense position, showing the orange belly



I Description of the fire bellied toad

- lowland amphibian species about 4.5 cm long
- lives in lowland regions where it spawns in richly vegetated shallow ponds, pools or flooded pastures; the water bodies must be free of fish and fully exposed to the sun
- lives in summer (April-September) almost constantly in or around water, is active at day and night, hibernates in wintertime under roots in woods, hedges and coastal cliffs
- in Denmark and Sweden this toad is known as the "bell frog", as its chorus reminds of "church bells under water". Its call, of up to 40 times per minute, serves to establish its territory and attract females
- breeding in water, spawn packets with 20-60 eggs are laid, all in all up to 300 eggs during two spawning periods
- spawn is laid on plant stems and under water. Grown toads feed on insects and larvae, as well as worms



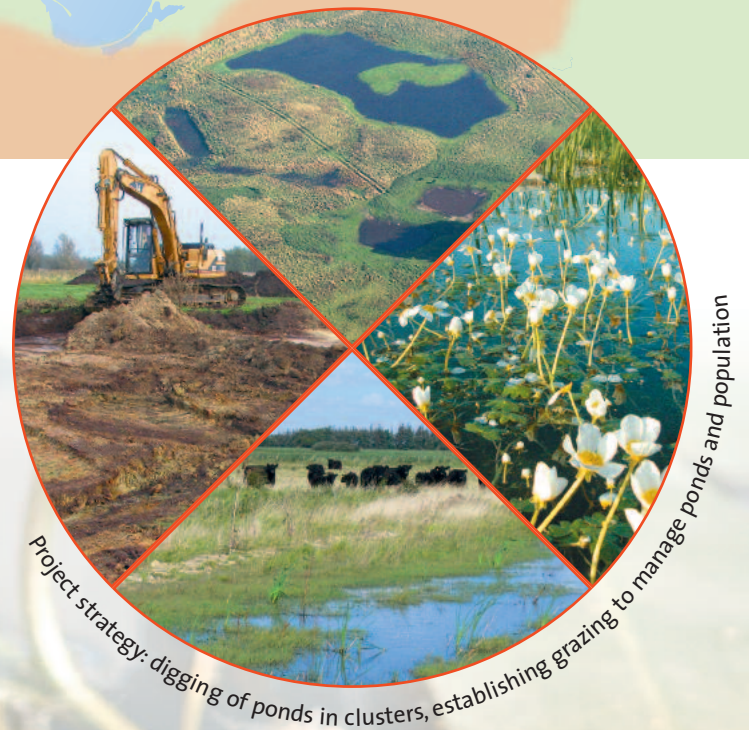
Underside of a young toad in original size – alongside the orange-red colouring, white pores, where a poisonous gland can deposit, are also typical

I Protection

In the Baltic region the fire bellied toad is living in the most northerly area of its habitat. Here, as in the whole of Europe, the population has been considerably reduced during past decades and is threatened with extinction.

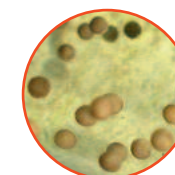
The project strategy is to secure each isolated population of bombina. The original genetic structure is respected within the population management, which is based on a population genetic study of the University of Potsdam, Prof. R. Tiedemann. Reserve populations are made for most of the populations in the participating countries to reduce the risk of accidental, local extinction.

- Distribution in the south Baltic region
- 27 LIFE-Bombina-Project sites

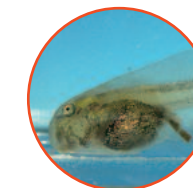


I First success in fire bellied toad protection

- 160 new spawning ponds, the size of 30 hectares measuring 20 km along the banks were established in the partner countries
- over 13 hectares of drained land have been re-flooded
- almost 50 hibernation sites were established close to the spawning ponds
- fish, known to eat toad spawn, were removed from some of the ponds
- within a breeding programme over 25 000 young amphibians were bred from 33 000 eggs and re-distributed, thus increasing or re-commencing populations
- extensive grazing for longterm pond embankment management was established in many sites. Ponds are kept to be sunexposed by that
- many people enjoyed fire bellied toads in concerts within the 1st and 2nd bombina calling festival. You can hear the chorus at www.life-bombina.de/index.php?id=59



eggs



tadpole



metamorphosis

