

European tree frog (*Hyla arborea*)



Physical characteristics

The tree frog is about 4,5 cm long and weighs up to 7 g. The front appendages are quite short and have 4 adhesive discs at the end of each finger. These enable the frog to climb very well; even a glass panel is not a problem. The surface of the frog's skin is smooth and very shiny, especially when sunbathing. The top side of the frog is bright green, and the stomach and the inside of the appendages are white to light grey. On both sides of the body, from nose to haunch there is a dark stripe.



Reproduction

Oviposition takes place predominantly in April and May. The so-called spawn bales are attached to vegetation like straws which are submerged in shallow waters. There are between 30 and 80 eggs in one bale. The hatched larvae are initially about three to five millimeters long and light yellow in color. It takes about 50 to 80 days for them to develop into a complete frog.

Nutrition

The hatched tadpole feeds on small algae in the water. The adult frog goes ashore at night in search of food. Spiders, small snails, beetles, ants as well as flying insects such as midges and flies are caught with its sticky tongue, transported directly into its mouth and swallowed whole.

Habitat and territorial requirements

For reproduction the tree frog needs very calm waters, on which the sun shines during the day and which are also free of fish. Here, their young can grow up safely. During the day, tree frogs need opportunities to hide on land such as stretches of woodland or wet meadows. They also enjoy sunbathing on large leaves. As a hematocryal animal the tree frog generally requires frost-free places like caves, large piles of leaves and gaps between roots of deciduous trees.

Threats and protection

With the draining of marshes and waters and the straightening of most streams and rivers, the frog has lost much of its habitat. The construction of roads and settlements, as well as intensive agriculture threatens this space as well. One way of protecting the tree frog population could be to cut down reed on unused wet meadows. This would expand the habitat of the tree frog by reducing the amount of shade affecting the spawn bales. Generally, it is better for the stock to have several small, spawning water bodies close to one another than one large, deep water body.

Task list: Green Belt

1. 4 equally sized groups are formed, one for each of the 4 topics. These groups are considered as the experts for their special topic. After reading their material, 4 new groups are formed, each with at least one expert for each topic. Everybody presents the information on their topic to their new group. The group now thinks about which of these animals could or could not live in the Green Belt and presents arguments supporting their opinion. These group results should be presented and discussed in class, and possibly also summarised as a class opinion. Furthermore it is possible to think about ways of creating individual biospheres to protect and conserve the Green Belt.

References:

Without author (2014): Europäischer Laubfrosch
(http://de.wikipedia.org/wiki/Europ%C3%A4ischer_Laubfrosch) (access: 18.02.2014)

Pictures:

- 1) Fischer, C. (2007): Laubfrosch (http://commons.wikimedia.org/wiki/File:Hyla_arborea,_juv_2.jpg)
(access: 18.02.2014)
- 2) Geller-Grimm, F. (1987): Europäischer Laubfrosch
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