

Feeding ecology of two newt species (*Triturus cristatus* and *Lissotriton vulgaris*) during the reproduction season

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ABSTRACT

Key-words:
feeding relations, resource partitioning, trophic niche, interspecific competition, Salamandridae

The aim of this study was to provide an in-depth survey of feeding ecology and trophic interactions of two syntopic newt species (*Triturus cristatus* and *Lissotriton vulgaris*) inhabiting aquatic breeding habitats from the eastern Romanian Carpathian Mountains. We sampled 736 individuals from both species. The trophic spectrum was based mostly on Asselidae (>30%). Our results show that both species may be considered generalists because their niche breadth is higher than 0.5, with largely overlapping trophic niches (>70%), which may indicate food competition.

RÉSUMÉ

L'écologie alimentaire de deux espèces de tritons (*Triturus cristatus* et *Lissotriton vulgaris*) pendant la saison de reproduction

Mots-clés :
relations alimentaires, partitionnement des ressources, niche trophique, concurrence interspécifique, Salamandridae

Le but de cette étude était d'analyser en profondeur l'écologie alimentaire et les interactions trophiques de deux espèces syntopiques de tritons (*Triturus cristatus* et *Lissotriton vulgaris*) vivant dans les habitats aquatiques dans l'est des Carpates roumaines. Nous avons échantillonné 736 individus des deux espèces. Le spectre trophique a été basé principalement sur les Asselidae (>30 %). Nos résultats montrent que les deux espèces peuvent être considérées comme des généralistes, car leur largeur de niche est supérieure à 0,5, en grande partie avec chevauchement des niches trophiques (>70 %), ce qui pourrait indiquer une concurrence alimentaire.

Amphibians are representatives for the current global biodiversity decline (Semlitsch, 2003; Stuart *et al.*, 2004). Many amphibian species require both terrestrial and aquatic habitats during their life cycle, which makes them particularly vulnerable to a wide range of detrimental factors (Alford *et al.*, 2001; Semlitsch, 2003). Newts (Order Caudata) occupy a variety of aquatic and terrestrial habitat types where they act as top-predators (Schabetsberger and Jersabek, 1995). Therefore, studies focused on their feeding ecology are necessary for

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