Knowledge and Management of Aquatic Ecosystems (2013) 408, 05 http://www.kmae-journal.org

DOI: 10.1051/kmae/2013040

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

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Received November 24, 2012
Revised January 17, 2013
Accepted February 5, 2013

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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Article published by EDP Sciences