

Is The American Bullfrog (*Lithobates Catesbeianus*) A Successful Invader As It Seems, Or Does It Receive Help From Other Invasives?

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Invasive species can negatively affect the diversity of native species by disturbing native trophic interactions. Often times invaders work in synergy with other invaders so the role of each invasive difficult to tease apart. In this study we explore the importance of top-down control on Crayfish population by Bullfrogs, and predatory introduced trout Rainbow Trout (*Oncorhynchus mykiss*). One purpose of our study is to study the diet the invasive bullfrog throughout Northeastern New Mexico. The removed bullfrogs are then 1.) Dissected to examine stomach contents and 2.) Diet is compared by male and female food preference. The Second purpose is to understand the impact of invasive Crayfish in North Eastern New Mexico Rivers. The Third and final purpose is to determine a connection between the two invasive species as well as a possible third invasive. Analyzing the diet of a population of American Bullfrogs we found a large proportion (over 80%) of Northern Crayfish (*Orconectes virilis*), another invasive. Our data strongly suggest that these two predators exert important top down control on Crayfish. Management programs to control these species must include a comprehensive control of all species involved to avoid the mesopredators to irrupt. This information can help maintain the invasive front of both Northern Crayfish and Bullfrogs alike as they spread throughout New Mexico and other areas of the Southwest.