Detection Of (*Batrachochytrium Dendrobatidis*), The Chytrid Fungus Associated With Global Amphibian Declines, In Montana Amphibians[TWS]

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In order to identify potential causes of declines in the northern leopard frog (Rana pipiens) and western toad (*Bufo boreas*), which have been noted since the 1980s, and assess the risk posed to other amphibian species whose status is uncertain, we submitted 98 tissue samples gathered from eight amphibian species across Montana for PCR based identification of the chytrid fungus (*Batrachochytrium dendrobatidis*). This chytrid fungus has been associated with declines, extirpations, and losses of numerous amphibian populations and entire species around the globe over the last two decades. Tissue samples from 30 museum voucher specimens of three species collected in the Flathead Valley in the 1970s, prior to amphibian declines in the area, were all negative for *B. dendrobatidis*. However, four species and 26 of 68 tissue samples gathered during inventory work across the state since 1998 tested positive for *B. dendrobatidis*. In light of its association with other amphibian declines, *B. dendrobatidis*, acting alone or synergistically with other stressors, is a potential cause of the declines observed and should be regarded as an ongoing threat to Montana amphibians. In order to prevent additional spread of this fungal pathogen personnel working in either lentic or lotic systems should thoroughly rinse and decontaminate all equipment with 10-percent bleach between (1) any sites where dead, dying, or ill amphibians are encountered, (2) sites located in different local watersheds or definitive clusters of sites, and (3) all breeding sites of sensitive species separated by > 1 km.