Spread, Impact, and Control of Purple Loosestrife (*Lythrum salicaria*) in North American Wetlands

Pump house and water control structure for green-tree impoundment at Montezuma National Wildlife Refuge in central New York. Waterfowl broods produced in adjacent flooded forest found excellent foraging conditions among floating and emergent aquatic plants in the foreground, 18 June 1968.

Ten years later, purple loosestrife had displaced native food and cover plants in the waterway surrounding the green-tree impoundment at the Montezuma Refuge. Biologist holding stadia rod in middle foreground is obscured by mature plants. Note the abundance of *Lythrum salicaria* seedlings along the water line, 16 August 1978.

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Introduction

Purple loosestrife (*Lythrum salicaria*
L.) is an erect, herbaceous perennial of Eurasian origin that became established in the estuaries of northeastern North America by the early 1800's. By the late 1800's it had spread throughout the northeastern United States and southeastern Canada, reaching as far north and west as Manitoba. *L. salicaria* caused few problems until the 1930's when it became aggressive in the floodplain pastures of the St. Lawrence River. Since then, it has steadily expanded its local distribution and now poses a serious threat to native emergent vegetation in shallowwater marshes throughout the northeastern and northcentral regions. Recent records indicate that purple loosestrife is also tolerant of soils and climates beyond these regions and threatens to become a serious problem in wetlands and irrigation systems in the Great Plains and the Far West.

It is no small irony that after 50 years of struggle to find some means of breaking up monotypic stands of cattails (*Typha*
spp.) to increase wildlife diversity and abundance, wetland managers must now cope with a foreign species that replaces cattail, but unfortunately creates another monospecific community of greatly diminished wildlife value.

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