Natural Heritage &
Endangered Species
Program

Commonwealth of Massachusetts
Division of Fisheries & Wildlife
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THREATENED PLANTS OF MASSACHUSETTS

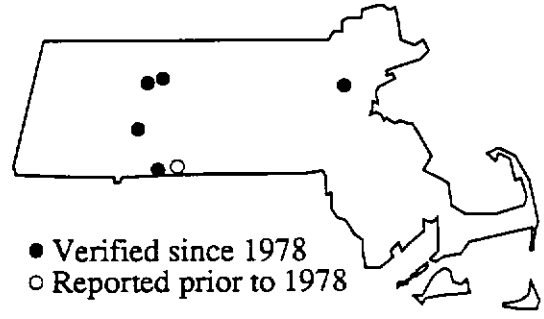
Many-Fruited False-Loosestrife
(*Ludwigia polycarpa* Short & Peter)

GENERAL DESCRIPTION: Many-fruited False-loosestrife is a much-branched, 2-10 dm (7 in. to 3 ft.) tall, herbaceous perennial with small, inconspicuous, 4-sided greenish flowers occurring in the axils of the upper leaves. This member of the Evening Primrose family (Onagraceae) is found in swamps, sloughs, marshes and wet prairies.

AIDS TO IDENTIFICATION: Many-fruited False-loosestrife has erect, 4-angled stems with sessile, alternate leaves that are lanceolate or linear-lanceolate in shape and 4-10 cm long. Plants bloom in August and September, and the flowers are sessile or on obscure pedicels less than 1 mm long in the leaf axils of elongate, leafy spikes. Four minute, greenish petals arise from the top of each side of a 4-sided cup-like receptacle (hypanthium) surrounding the ovary. The fruit is a roundly 4-sided or shallowly grooved, short-cylindric capsule that is 4-7 mm long (1/8-1/4 in.) and 3-5 mm (about 1/8 in.) in diameter. The capsule is smooth (glabrous) and contains many seeds. Short, leaf-like appendages called bracteoles are inserted well above the base of the hypanthium. The lack of definite pedicels for the flowers differentiates *L. polycarpa* from the similar *L. alternifolia,* which has pedicels 3-5 mm (about 1/8 in.) long. Many-fruited False-loosestrife should not be confused with species in the loosestrife genus (*Lythrum*) in the family Lythraceae. True loosetrifes usually have 6-merous flowers with red-purple to white petals and 2-celled capsules.

Gleason, H.A. The New Britton and Brown Illustrated Flora of the US & Adjacent Canada. NY Botanical Garden, 1952.

Documented Range of
Many-fruited False-loosestrife



Distribution in Massachusetts

HABITAT & ASSOCIATED SPECIES: In Massachusetts, Many-fruited False-loosestrife occurs almost exclusively in river floodplains, where it inhabits wet, exposed mud in oxbows and depressions within the zone of annual flooding. Canopy cover at the floodplain sites varies from nearly open to closed and is composed mainly of silver maple (*Acer saccharinum*), green ash (*Fraxinus pennsylvanica*), pin oak (*Quercus palustris*) and/or black willow (*Betula nigra*). Other frequent associates are northern water-plantain (*Alisma plantago-aquatica*), false nettle (*Boehmeria cylindrica*), false water-pepper (*Polygonum hydropiperoides*), ditch-stonecrop (*Penthorum sedoides*), common water-purslane (*Ludwigia palustris*), swamp candles (*Lysimachia terrestris*), and buttonbush (*Cephalanthus occidentalis*).

RANGE: The documented range of Many-fruited False-loosestrife extends from central Ohio and southern Ontario to southeastern Minnesota south to the Ohio River Valley of Kentucky, northeastern Arkansas, eastern Nebraska and eastern Kansas. To the northeast, this False-loosestrife is a rare disjunct, occurring locally along the Susquehanna River in Pennsylvania, near Lake Champlain in Vermont, and along the Connecticut River in Massachusetts and Connecticut.

POPULATION STATUS IN MASSACHUSETTS: Many-fruited False-loosestrife is currently listed as "Threatened" in Massachusetts. As with all species listed in Massachusetts, individuals of the species are protected from take (picking, collecting, killing...) and sale under the Massachusetts Endangered Species Act. There are nine known stations, seven extant and two historical (unverified since 1978), with all but one occurring in the Connecticut River valley. Because of its disjunct distribution and rarity in the Northeast, Many-fruited False-loosestrife is on the rare species list of each of the four northeastern states (Massachusetts, Connecticut, Vermont, Pennsylvania) in which it occurs.

MANAGEMENT RECOMMENDATIONS: As with many rare species, exact needs for management of Many-fruited False-loosestrife are not known. The following comments are based primarily on observations of populations in Massachusetts. Although Many-fruited False-loosestrife inhabits a wide variety of wetland habitats in the midwest, it is mainly limited to river floodplains in Massachusetts and its occurrence is linked to the availability of suitable floodplain habitat. Undisturbed floodplain habitat is rare throughout the state due to housing and industrial development and to conversion of these highly-fertile areas to agricultural land. The success of Many-fruited False-loosestrife in Massachusetts will depend on the of protection of remaining floodplain habitat, rather than species-specific management techniques.

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