August 1987
GOVERNMENT DOCUMENTS
COLLECTION

OCT 31 1988

University of Massachusetts
Depository Copy

Massachusetts Rare Plants

A Synopsis of Interesting Facts

There are about 2700 species of plants recorded from Massachusetts

1700 are native

1000 are introduced, adventive, or otherwise alien

241 native species are on the 1987 list of rare plants of Massachusetts

This represents about 14% of the native flora

81 are Endangered (may become extirpated if trends continue)

59 are Threatened (may become endangered if trends continue)

55 are Special Concern (may become threatened if trends continue)

46 are possibly extirpated (no recent records, feared lost from state)

1 is also federally listed as Endangered

- o 43 species have been added to the state's rare list since first published in 1978
- o 45 species have been dropped since 1978 due to inventory work by the Massachusetts Natural Heritage Program

Selected plant groups represented on the rare plant list

Group	# species	examples
Ferns	9	Braun's Holly-fern, Smooth Woodsia
Grasses	22	Hairgrass, Sea Lyme-grass
Sedges	45	includes 26 in genus <u>Carex</u> ; Walter's Sedge, Long's Bulrush
Lilies	1	Devil's-bit
Orchids	17	Showy Lady's-slipper, Putty-root
Roses & Shadbushes	8	Northern Prickly Rose, Nantucket Shadbush
Peas & Clovers	1	Sessile-leaved Tick-trefoil
Figworts	8	Winged Monkey-flower, Sandplain Gerardia
Composites	17	Eastern Silvery Aster, New England Boneset
Trees	5	Sweetbay Magnolia, Yellow Oak
Shrubs & Woody Vines	19	Hairy Honeysuckle, Swamp Birch

Distribution of our rare species (includes current and historical records)

- o Rare plants occur from Salisbury to Mt. Washington and from Nantucket to Williamstown
- o Of the 351 towns and cities in the Commonwealth, rare plants have been documented (historically or currently) from 314
- o The county distribution looks like this:

Berkshire	113 species	Essex	48 species
Hampshire	70	Worcester	47
Franklin	69	Nantucket	43
Middlesex	61	Bristol	39
Hampden	55	Norfolk	35
Barnstable	53	Dukes	34
Plymouth	52	Suffolk	17

- o The towns with the most rare species are:

Sheffield	50 species	Barnstable	27
Nantucket	43	West Stockbridge	26
Stockbridge	37	Amherst	24
Williamstown	36	Holyoke	24
Sunderland	28	Deerfield, Plymouth	21

- o 47 rare plant species are known only from a single current site. Examples are:

Fir Clubmoss -	Amherst	Silverling -	Salisbury
Acadian Quillwort -	Plymouth	Sweetbay Magnolia -	Gloucester
Lake Quillwort -	Concord	Long's Bitter-cress -	Wareham
Smooth Woodsia -	Cheshire	Purple Cress -	Sheffield
Spiked False-oats -	Holyoke	Sand Violet -	Ashburnham
Chestnut-colored Sedge -	Pittsfield	Mountain Cranberry -	Adams
Glaucous Sedge -	Lynnfield	Spurred Gentian-Cumington/Chesterfield	
Few-flowered Sedge -	Hawley	Sea Pink -	Dartmouth
Three-angled Spike-rush-Nantucket		Basil Mountain-mint -	Canton
Ram's-head Lady's-slipper-Sunderland		Snowberry -	Deerfield
Heartleaf Twayblade -	Yarmouth	Sclerolepis -	Douglas

Some habitats of our rare plant species

seabeaches, saltmarshes	18 species	rivers, estuaries	34 species
acid bogs	10	floodplain forests, oxbows	11
lime fens	23	rich, mesic forests	15
coastal plain ponds	22	pine barrens	9
rock ledges	26	heathlands, sandplains	16

Protection needs are centered around specific vulnerable habitats

- o HEATHLANDS AND SANDPLAIN GRASSLANDS - occur primarily on Nantucket, Martha's Vineyard and outer Cape Cod; diminishing due to lack of grazing, suppression of natural fires, and development
- o COASTAL PLAIN PONDS - mostly Plymouth and Barnstable Cos.; increasingly threatened by pondshore development and recreation
- o LIME FENS - occur in Berkshire Co.; experiencing filling and other development pressures
- o FLOODPLAIN FORESTS - mostly along Connecticut and Housatonic Rivers; many examples have been converted to agricultural land
- o PINE BARRENS - occur in Plymouth Co., Barnstable Co., Martha's Vineyard, Montague, Westfield, and Chicopee; becoming increasingly fragmented and replaced over large areas by housing developments and altered by forest succession

If you know of locations of rare plants, please contact us

For further information or a copy of the list of "Rare Native Plants of Massachusetts", contact Bruce A. Sorrie, Program Botanist, Natural Heritage and Endangered Species Program, Massachusetts Division of Fisheries and Wildlife, 100 Cambridge St., Boston, MA 02202 (617) 727-9194