

	Me.	N.	H.	Vt.	Mass.	R.	I.	Conn.
* <i>Lychnis dioica</i> L.	+	+	+	+	+	+	+	+
* <i>Lychnis Flos-cuculi</i> L.	+	+	+	+	+	+	+	+
* <i>Lychnis Viscaria</i> L.	+	+			+			+
* <i>Myosoton aquaticum</i> (L.) Moench		+	+	+	+			+
<i>Paronychia argyrocoma</i> (Michx.) Nutt. var. <i>albimontana</i> Fern.	+	+			+			
<i>Paronychia canadensis</i> (L.) Wood		+	+	+	+	+	+	+
<i>Paronychia fastigiata</i> (Raf.) Fern.					+	—		+
<i>Sagina decumbens</i> (Ell.) T. & G.				+	+			+
<i>Sagina nodosa</i> (L.) Fenzl	+							
<i>Sagina nodosa</i> var. <i>pubescens</i> Mert. & Koch	+				+			
<i>Sagina procumbens</i> L.	+	+	+	+	+	+	+	+
* <i>Saponaria ocymoides</i> L.					+			
* <i>Saponaria officinalis</i> L.	+	+	+	+	+	+	+	+
* <i>Saponaria Vaccaria</i> L.	+	+	+	+	+	+	+	+
* <i>Scleranthus annuus</i> L.	+	+			+	+	+	+
<i>Silene acaulis</i> L. var. <i>exscapa</i> (All.) DC	+	+						
<i>Silene antirrhina</i> L.	+	+	+	+	+	+	+	+
<i>Silene antirrhina</i> f. <i>apetala</i> Farw.	+	+			+	—		+
<i>Silene antirrhina</i> f. <i>Deaneana</i> Fern.	—				+	+	+	+
* <i>Silene Armeria</i> L.	+	+	+	+	+	+	+	+
<i>Silene caroliniana</i> Walt. var. <i>pensylvanica</i> (Michx.) Fern.			—		+	+	+	+
* <i>Silene conica</i> L.					+			
* <i>Silene Cserei</i> Baumg.	+	+	+	+	+	+		
* <i>Silene Cucubalus</i> Wibel	+	+	+	+	+	+	+	+
* <i>Silene dichotoma</i> Ehrh.	+	+	+	+	+			+
* <i>Silene gallica</i> L.	+	+	+	+				
* <i>Silene nivea</i> (Nutt.) Otth.	+							
* <i>Silene noctiflora</i> L.	+	+	+	+	+	+	+	+
* <i>Silene nutans</i> L.	+							
* <i>Silene pendula</i> L.	+							
<i>Silene stellata</i> (L.) Ait. f.				+	—	+	+	+
* <i>Spergula arvensis</i> L.	+	+	+	+	+	+	+	+
* <i>Spergula arvensis</i> var. <i>sativa</i> (Boenn.) Reichenb.				+				+
<i>Spergularia canadensis</i> (Pers.) Don	+	+			+	+	+	+
<i>Spergularia marina</i> (L.) Griseb.	+	+			+	+	+	+
<i>Spergularia marina</i> var. <i>leiosperma</i> (Kindb.) Gurke	+	+			+	+	+	+
* <i>Spergularia rubra</i> (L.) J. & C. Presl.	+	+	+	+	+	+	+	+
<i>Stellaria Alsine</i> Grimm	+	+	+	+	+			
<i>Stellaria calycantha</i> (Ledeb.) Bong.	+	+	+	+				+
<i>Stellaria calycantha</i> var. <i>floribunda</i> Fern.	+	+	+	+	+			+
<i>Stellaria calycantha</i> var. <i>isophylla</i> Fern.	+	+	+	+	+	+	+	+
* <i>Stellaria graminea</i> L.	+	+	+	+	+	+	+	+
* <i>Stellaria Holostea</i> L.					+			+
<i>Stellaria humifusa</i> Ehrh.	+							
<i>Stellaria longifolia</i> Muhl.	+	+	+	+	+	+	+	+
* <i>Stellaria media</i> (L.) Cyrillo.	+	+	+	+	+	+	+	+
<i>Stellaria pubera</i> Michx.				+				+
<i>Stellaria pubera</i> var. <i>silvatica</i> (Beguinot) Weath.								+
* <i>Tunica Saxifraga</i> (L.) Scop.				—	+			
CERATOPHYLLACEAE								
<i>Ceratophyllum demersum</i> L.	+	+	+	+	+	+	+	+
<i>Ceratophyllum echinatum</i> Gray	+		+	+	+	+	+	+
NYMPHAEACEAE								
<i>Brasenia Schreberi</i> Gmel.	+	+	+	+	+	+	+	+
* <i>Cabomba caroliniana</i> Gray		—			+			+
* <i>Nelumbo lutea</i> (Willd.) Pers.				—	+			+
<i>Nuphar advena</i> (Ait.) Ait. f.	+							—

	Me.	N.	H.	Vt.	Mass.	R.	I.	Conn.
<i>Nuphar microphyllum</i> (Pers.) Fern.	+	+	+	+	+			+
x <i>Nuphar rubrodiscum</i> Morong	+	+	+	+	+	+		—
<i>Nuphar variegatum</i> Engelm.	+	+	+	+	+	+		+
<i>Nymphaea odorata</i> Ait.	+	+	+	+	+	+		+
<i>Nymphaea odorata</i> var. <i>gigantea</i> Tricker					+		—	
<i>Nymphaea odorata</i> f. <i>rubra</i> Guillon	+	+			+			
<i>Nymphaea tetragona</i> Georgi	+							
<i>Nymphaea tuberosa</i> Paine				+				+
RANUNCULACEAE								
* <i>Aconitum Napellus</i> L.	+	+	+	+	+			—
<i>Actaea pachypoda</i> Ell.	+	+	+	+	+	+		+
<i>Actaea pachypoda</i> f. <i>rubrocarpa</i> (Killip) Fern.		+	—		+			
<i>Actaea rubra</i> (Ait.) Willd.	+	+	+	+	+	+		+
<i>Actaea rubra</i> f. <i>neglecta</i> (Gillman) Robins.	+	+	+	+	+			+
<i>Anemone canadensis</i> L.	+	+	+	+	+			+
<i>Anemone cylindrica</i> Gray	+	+	+	+	+	+		+
<i>Anemone multifida</i> Poir.	+		+					
* <i>Anemone nemorosa</i> Lam.					+			
<i>Anemone quinquefolia</i> L.	+	+	+	+	+	+		+
<i>Anemone riparia</i> Fern.	+	+	+	+	+	+		+
<i>Anemone virginiana</i> L.	+	+	+	+	+	+		+
<i>Anemone virginiana</i> f. <i>leucosepala</i> Fern.	—	+	+	+	+	+		+
<i>Anemonella thalictroides</i> (L.) Spach	+	+	+	+	+	+		+
<i>Aquilegia canadensis</i> L.	+	+	+	+	+	+		+
<i>Aquilegia canadensis</i> var. <i>coccinea</i> (Small) Munz		+						+
<i>Aquilegia canadensis</i> var. <i>flaviflora</i> (Tenney) Britt.						+		+
<i>Aquilegia canadensis</i> f. <i>Phippenii</i> (J. Robinson) H. Hoffm.	+				+			—
* <i>Aquilegia vulgaris</i> L.	+	+	+	+	+	+		+
<i>Caltha palustris</i> L.	+	+	+	+	+	+		+
<i>Cimicifuga racemosa</i> (L.) Nutt.	+	+	—		+			+
<i>Cimicifuga racemosa</i> f. <i>dissecta</i> (Gray) Fern.								+
* <i>Clematis dioscoreifolia</i> Levl. & Vaniot var. <i>robusta</i> (Carr.) Rehd.					+			+
<i>Clematis verticillaris</i> DC.	+	+	+	+	+	+		+
<i>Clematis virginiana</i> L.	+	+	+	+	+	+		+
<i>Coptis groenlandica</i> (Oeder) Fern.	+	+	+	+	+	+		+
* <i>Delphinium Ajacis</i> L.				—	+	+		+
* <i>Delphinium consolida</i> L.						+		—
<i>Hepatica acutiloba</i> DC.	+	+	+	+	+			+
<i>Hepatica americana</i> (DC.) Ker	+	+	+	+	+	+		+
<i>Hydrastis canadensis</i> L.				+				+
* <i>Nigella damascena</i> L.					+			+
<i>Ranunculus abortivus</i> L.	+	+	+	+	+	+		+
<i>Ranunculus abortivus</i> var. <i>acrolasius</i> Fern.	+	+	+	+	+	+		+
<i>Ranunculus abortivus</i> var. <i>eucyclus</i> Fern.	+	+	+	+	+			+
* <i>Ranunculus acris</i> L.	+	+	+	+	+	+		+
* <i>Ranunculus acris</i> var. <i>latisectus</i> G. Beck	+	+	+	+	+	+		+
<i>Ranunculus allegheniensis</i> Britt.			—	+	+	+		+
<i>Ranunculus ambigens</i> S. Wats.	+	+			+	+		+
* <i>Ranunculus bulbosus</i> L.	+	+	+	+	+	+		+
* <i>Ranunculus bulbosus</i> var. <i>dissectus</i> Babey	+				+	+		
* <i>Ranunculus bulbosus</i> var. <i>valdepubens</i> (Jord.) Briq.					+	+		
<i>Ranunculus Cymbalaria</i> Pursh	+	+			+	+		—
<i>Ranunculus fascicularis</i> Muhl.		+	—		+			+
* <i>Ranunculus Ficaria</i> L.					+			

The Portulacaceae and the Caryophyllaceae were treated by B. L. Robinson in 1902 (Rhodora V-188 and 235) and the Ranunculaceae by C. A. Weatherby, C. H. Knowlton and W. S. Ripley Jr. in 1918 (Rhodora XX-182 and 193). In the years since these previous reports were published more specimens have come into the herbaria. Also there have appeared plant lists for three of the New England States: "The Flora of Vermont" in 1937, "Check-List of the Vascular Plants of Maine" in 1948 and "The Flora of Rhode Island" in 1952.

In general the introduced plants have tended to spread during the intervening years. The native species in many cases show the same distribution as in the earlier reports. Some of the exceptions are here listed.

Arenaria caroliniana, a coastal plain species previously unreported, has now been collected in Weekapaug and Westerly, Rhode Island. *Ranunculus lapponicus* was collected by G. D. Chamberlain in 1939 in Mapleton, Maine and was seen in other localities in the Aroostook River Basin, the first stations for this species in New England. *Actaea pachypoda* forma *rubrocarpa* and *Ranunculus abortivus* var. *acrolasius* were not recognized until after 1918.

Cerastium nutans, *Ranunculus longirostris* and *R. subrigidus*, formerly known from western Vermont and Connecticut, have now been collected in western Massachusetts. *Arenaria macrophylla*, reported from Vermont only, has now been found in Massachusetts and Connecticut.

Silene acaulis var. *exscapa* has been collected on Mt. Katahdin, Maine as well as in the White Mountains. *Silene stellata*, previously known from Rhode Island and Connecticut, is now represented by a specimen from Windsor, Vermont.

The geographical areas are the same as used in the previous reports. It is interesting to note that in spite of the large number of species and varieties represented, there are only four that can be considered as generally distributed. Here again a large number of the plants included are not native to New England but the percentage is not so great as in the previous report; only forty percent of the plants are introduced. Because of this the various subgroups in

this latter category are used as in the previous report.

I. GENERALLY DISTRIBUTED. — *Arenaria lateriflora*, *Nuphar variegatum*, *Clematis virginiana*, *Thalictrum polygamum*.

Ia. GENERAL, EXCEPT THE COAST OF WASHINGTON COUNTY, MAINE. — *Cerastium arvense*, *Ceratophyllum demersum*, *C. echinatum*, *Brasenia Schreberi*, *Nymphaea odorata*, *Actaea rubra*, *Anemone quinquefolia*, *Ranunculus recurvatus*.

Ceratophyllum echinatum is very local. There are only three widely scattered stations in Maine and none in Vermont or Rhode Island. *Brasenia Schreberi* has only one station north of 45°, at Portage Lake, Maine. While *Nymphaea odorata* fits this category, *N. odorata* var. *gigantea* has only six stations, three in Essex County, Massachusetts, two in Barnstable County, Massachusetts and one on Block Island, Rhode Island. *Actaea rubra* is not recorded from Cape Cod east of Sandwich.

Ib. GENERAL, EXCEPT CAPE COD. — *Stellaria calycantha* and vars. *floribunda* and *isophylla*, *Actaea pachypoda*, *Coptis groenlandica*, *Ranunculus abortivus* var. *acrolasius*, *R. pensylvanicus*, *R. trichophyllus* and var. *calvescens*.

Stellaria calycantha itself is infrequent; var. *floribunda* is not found in Rhode Island and has only four stations in Vermont.

Ic. GENERAL, EXCEPT CAPE COD AND THE MAINE COAST EAST OF THE KENNEBEC RIVER. — *Nuphar rubrodiscum*, *Caltha palustris*, *Ranunculus septentrionalis*, *Caulophyllum thalictroides*. *Ranunculus septentrionalis*, is not found in Massachusetts east of the Connecticut valley nor in Rhode Island.

Id. GENERAL, EXCEPT CAPE COD AND WASHINGTON COUNTY, MAINE. — *Claytonia caroliniana*, *Stellaria longifolia*, *Nuphar microphyllum*, *Ranunculus abortivus* var. *eucyclus*. Both *Claytonia caroliniana* and *Stellaria longifolia* are rare in northern Maine with one station each in that area.

II. NORTHERN — NUMEROUS STATIONS SOUTH OF 43°. — *Stellaria Alsine*, *Ranunculus reptans* and var. *ovalis*, *Thalictrum polygamum* var. *hebecarpum*.

Stellaria Alsine is not found in northern Maine. *Thalictrum polygamum* var. *hebecarpum* apparently is absent from Rhode Island and Connecticut.

III. ALPINE-ARCTIC. — *Montia lamprosperma*, *Sagina nodosa* and var. *pubescens*, *Arenaria groenlandica* and var. *glabra*, *Silene acaulis* var. *exscapa*, *Paronychia argyrocoma* var. *albimontana*, *Stellaria humifusa*.

Silene acaulis var. *exscapa* is strictly alpine. *Stellaria humifusa* is arctic coming into New England along the eastern Maine coast as far as Hancock County.

IVa. CAPE COD, BUT NOT NORTHERN MAINE-GENERAL IN MAINE SOUTH OF 45°. — *Sagina procumbens*, *Silene antirrhina*, *Anemone cylindrica*. *Anemone cylindrica* apparently occurs in Maine only in the south western part.

IVb. CAPE COD, BUT NOT NORTHERN MAINE—NOT ON MAINE COAST EAST OF THE KENNEBEC RIVER. — *Ranunculus abortivus*.

IVc. CAPE COD, BUT NOT NORTHERN MAINE—SOME NORTH OF 45°, BUT NOT IN WASHINGTON COUNTY. — *Anemone virginiana*, *Aquilegia canadensis*.

Aquilegia canadensis var. *coccinea* is reported only from Troy, New Hampshire and North Guilford, Connecticut.

V. NEITHER CAPE COD NOR NORTHERN MAINE AND NOT IN WASHINGTON COUNTY. — *Hepatica americana*, *Ranunculus flabellaris*, *Thalictrum dioicum*.

VIa. CHIEFLY THE THREE SOUTHERN STATES, BOTH CAPE COD AND WESTERN MASSACHUSETTS. — *Ranunculus sceleratus*, *Thalictrum revolutum*, *Lindera Benzoin*, *Sassafras albidum* and var. *molle*. Except for four stations, *Ranunculus sceleratus* seems to be confined to the coastal area.

VIb. CHIEFLY THE THREE SOUTHERN STATES, CAPE COD BUT NOT WESTERN MASSACHUSETTS. — *Ranunculus ambigens*. This species is mainly coastal but is frequent in the Connecticut valley.

VIc. CHIEFLY THE THREE SOUTHERN STATES, WESTERN MASSACHUSETTS BUT NOT CAPE COD. — *Paronychia canadensis*, *Silene caroliniana* var. *pennsylvanica*, *Anemonella thalictroides*, *Ranunculus fascicularis*, *Liriodendron Tulipifera*. The only station reported for *Silene caroliniana* var. *pennsylvanica* in western Massachusetts is in the town of Mt. Washington. *Ranunculus fascicularis* prefers the trap ridges.

VI d. CHIEFLY THE THREE SOUTHERN STATES, NEITHER CAPE COD NOR WESTERN MASSACHUSETTS. — *Paronychia fastigiata*, *Sagina decumbens*, *Ranunculus micranthus* var. *delitescens*. *Paronychia fastigiata* is confined to the Connecticut valley and eastern Massachusetts. *Ranunculus micranthus* var. *delitescens* is another species that prefers the trap ridges.

VIe. SOUTHWESTERN NEW ENGLAND CHIEFLY. — *Claytonia virginica*, *Silene stellata*, *Cimicifuga racemosa*, *Ranunculus hispidus* and var. *falsus*.

Silene stellata has one station at Windsor in eastern Vermont. The stations of *Cimicifuga racemosa* at North Berwick, Maine and Enfield, New Hampshire are evidently introduced. *Ranunculus hispidus* var. *falsus* has one outlying station at Bethel in central Vermont.

VII. COASTAL PLAIN. — *Arenaria caroliniana*, *Magnolia virginiana*, *Arenaria caroliniana* has two stations only at Weekapaug and Westerly, Rhode Island. *Magnolia virginiana* has two stations close together in eastern Essex County, Massachusetts.

VIII. CALCICOLOUS — CHIEFLY WEST OF THE CONNECTICUT RIVER IN THE SOUTH, IF IN EAST MOSTLY NORTH OF 45°. — *Arenaria stricta*, *Anemone canadensis*, *A. multifida*, *A. riparia*, *Clematis verticillaris*, *Ranunculus allegheniensis*, *R. longirostris*, *R. subrigidus*, *Thalictrum confine*. *Arenaria stricta* has a few stations in central New Hampshire. *Anemone canadensis* is evidently an introduction at the numerous stations in eastern Massachusetts. *Clematis verticillaris* is widely distributed,

chiefly away from the coast, but nowhere common. *Ranunculus allegheniensis* occurs in the calcareous areas of western New England and is frequent in eastern Massachusetts where there are basic rocks.

IX. WESTERN NEW ENGLAND CHIEFLY. — *Arenaria macrophylla*, *Cerastium nutans*, *Nymphaea tuberosa*, *Hepatica acutiloba*, *Hydrastis canadensis*, *Trollius laxus*, *Podophyllum peltatum*, *Menispermum canadense*.

Hepatica acutiloba extends sparingly eastward on sweet soils. It might well be included in the list of calcicolous plants. *Hydrastis canadensis* is very rare with stations at Shelburne and Weybridge, Vermont and Plainville and Southington, Connecticut. *Trollius laxus* is even more local and is apparently confined to northwestern Connecticut at Cornwall, West Cornwall and Canaan.

X. MARITIME HALOPHYTES — IN VICINITY OF COAST, NO ISLAND STATIONS. — *Arenaria peploides* var. *robusta*, *Spergularia marina* and var. *leiosperma*, *S. canadensis*, *Ranunculus Cymbalaria*.

XI. ESTUARINE. — *Nuphar advena*. This species is found at Merry-meeting Bay in Maine and in southwestern Connecticut.

XII. INTRODUCED SPECIES — GENERAL. — *Agrostema Githago*, *Arenaria serphyllifolia*, and its var. *tenuior*, *Cerastium vulgatum*, *Dianthus barbatus*, *Lychnis alba*, *L. dioica*, *Saponaria officinalis*, *S. Vaccaria*, *Silene Cucubalus*, *S. noctiflora*, *Spergula arvensis*, *Spergularia rubra*, *Stellaria graminea*, *S. media*, *Ranunculus acris*, *R. bulbosus*, *R. repens* and var. *glabratus*, *Berberis Thunbergii*, *B. vulgaris*.

Four members of this group have not been reported north of 45°: *Lychnis alba*, *Saponaria officinalis*, *Ranunculus bulbosus* and *R. repens*; *Berberis vulgaris* has only one station north of 45°.

XIIa. INTRODUCED SPECIES — NEITHER CAPE COD NOR NORTHERN MAINE. — *Lychnis chalconica*, *L. Flos-cuculi*.

XIIb. INTRODUCED SPECIES WITH NORTHERN TENDENCIES. — *Aquilegia vulgaris*.

XIIc. INTRODUCED SPECIES WITH SOUTHERN TENDENCIES, CHIEFLY SOUTH OF 43°. — *Portulaca grandiflora*, *P. oleracea*, *Cerastium semidecandrum*, *Dianthus Armeria*, *D. deltoides*, *Lychnis Coronaria*, *Scleranthus annuus*, *Silene Armeria*, *S. dichotoma*, *Cabomba caroliniana*, *Delphinium Ajacis*.

XIId. INTRODUCED SPECIES — SPORADIC. — *Dianthus plumarius*, *Gypsophila elegans*, *G. muralis*, *G. paniculata*, *Myosoton aquaticum*, *Silene gallica*, *Aconitum Napellus*, *Ranunculus acris* var. *latisectus*, *R. repens* var. *erectus*, var. *linearilobus*, var. *pleniflorus*, var. *villosus*.

XIIe. INTRODUCED SPECIES — LOCAL. — *Cerastium viscosum*, *Holosteum umbellatum*, *Lychnis Viscaria*, *Silene conica*, *S. Cserei*, *Tunica Saxifraga*, *Nelumbo lutea*, *Nigella damascena*, *Ranunculus Ficaria*, *Xanthorhiza simplicissima*, *Akebia quinata*, *Magnolia acuminata*, *M. tripetala*.

The following local plants are represented by only one station in New England and it is doubtful if they should be considered as a real part of our flora: *Calandrinia caulescens* var. *Menziesii* collected at

Seekonk, Massachusetts; *Montia perfoliata* at Jefferson, New Hampshire; *Montia sibirica* at Manchester, Massachusetts; *Herniaria glabra* at Bangor, Maine; *Saponaria ocymoides* at Lexington, Massachusetts; *Silene nivea* at Orono, Maine; *S. nutans* at Bar Harbor, Maine; *S. pendula* at Strong, Maine; *Anemone nemorosa* at Danvers, Massachusetts; *Delphinium consolida* at Providence, Rhode Island; *Calycanthus fertilis* at Seymour, Connecticut.

XIII. MISCELLANEOUS. — *Arenaria rubella*, *Stellaria pubera*, *Nymphaea tetragona*, *Ranunculus Gmelini* var. *Hookeri*, *Thalictrum dasycarpum*, *T. polygamum* var. *intermedium*. *Arenaria rubella* is found in New England only at Smuggler's Notch, Vermont. *Stellaria pubera* with a normal range from New Jersey to Illinois southward is recorded from Bethel, Vermont, but questionably so because of insufficient data. Its var. *sylvatica* is probably introduced at its two stations at Norwalk and Wilton, Connecticut. *Nymphaea tetragona* is represented by only three stations, Attean, Perham and Portage Lake, all in Maine. *Ranunculus Gmelini* var. *Hookeri* is a boreal plant found at Presque Isle and New Limerick in Aroostook County, Maine. *Thalictrum dasycarpum* is also outside its normal range and is probably an escape from cultivation at its five known stations in southwestern New England. *Thalictrum polygamum* var. *intermedium* has only two stations in New England — Bristol, Rhode Island and Franklin, Connecticut. — R. C. BEAN, A. F. HILL, AND R. J. EATON.

A NEW FORM OF ASTRAGALUS MOLLISSIMUS. —

Astragalus mollissimus Torr., the woolly locoweed, is of frequent occurrence in the western half of Kansas as evidenced by the fact that herbarium specimens exist from each county of the area. The species grows in a wide variety of habitats but is most abundant on rocky, gravelly, prairie hillsides. Of the thousands of specimens observed by me all have had rose-purple to bright purple corollas except for a small colony in Barber County, Kansas, which have yellow corollas. This character has been observed through two seasons. In all other respects the plants are like the species. The yellow-flowered plants may be described as: *Astragalus mollissimus* Torr., forma *flavus* McGregor, forma nov. Ad formam typicam similis, sed petalis flavis. T32S, R14W, Sec. 20, Gypsum Hills prairie, Barber County, Kansas, April 25, 1959, *McGregor 14186* (Type, KANU.) — RONALD L. MCGREGOR, UNIVERSITY OF KANSAS, LAWRENCE.