THE ORDER OF BLOOM OF TREES AND SHRUBS
AT THE ARNOLD ARBORETUM

IN order to establish a beautiful planting of flowering trees and shrubs, one must have a knowledge of those plants which effectively bloom together. Although the actual day on which a certain plant may come into bloom varies from year to year according to the weather, there are some that always bloom together, and it is this information that gardeners should always have available when planning their gardens. In this bulletin a large number of the more ornamental trees and shrubs growing at the Arboretum are listed according to their sequence of bloom. Many varieties have been omitted because of lack of space, but the list is of sufficient length to serve as a basic list to which future additions may be made. Of particular interest could be the addition of notes on the length of bloom of these plants, and in making additions and notes of this character the list should become of increasing value.

Many have had the opportunity of following the spring from the South into the North. In fact, one could enjoy the beauties of any particular period in the spring a full three months simply by travelling in slow stages from Florida to Maine. The following schedule shows the approximate times the mountain-laurel (Kalmia latifolia) blooms at different places in the United States. Though these vary according to the weather during the particular year in question (see Bulletin, No. 3, April 29, 1939, page 16, for other information on this same point), nevertheless, there is a progressive display of mountain-laurel from the South to the North over a two-month period.
The time Kalmia latifolia blooms in different regions

Augusta, Georgia .................................. Mid April
Glen St. Mary, Florida ............................... Late April
Monongahela National Forest, West Virginia .... Mid May
Shenandoah Valley, Virginia ......................... Mid May
St. Louis, Missouri .................................. Late May
Philadelphia, Pennsylvania ........................ Late May
New York, New York ................................ Early June
Columbus, Ohio ..................................... Early June
Chicago, Illinois .................................... Mid June
Rocheester, New York ............................... Mid June
Boston, Massachusetts ............................... Mid June
Seattle, Washington ................................. Late June

Since most of the hybrid rhododendrons bloom slightly before the mountain-laurel and most of the Philadelphus species and varieties bloom at about the same time, it is easy to correlate the time of bloom of other plants with those in such a list. With this in mind, the list offered in this bulletin is really applicable anywhere since the sequence of bloom is the same, even though the actual time mentioned is for the vicinity of Boston, Massachusetts.

In consulting the following list it should be kept in mind that, though a certain plant may be listed as blooming the first part of June, it may remain in full bloom and hence be effective from the landscape point of view for at least two weeks or more, and so can be used in combination with plants that normally bloom later. The length of bloom is an intensely interesting study, and because of a long blooming period, many plants are quite useful. As an example, Spiraea prunifolia plena normally starts to bloom at the Arboretum on May 1. It frequently remains effective for three full weeks. On the other hand, a plant like Amelanchier canadensis may remain in bloom only five days or even drop its petals in three days if the weather is unusually warm. Consequently, the length of time the flowers remain on the plant is important and depends upon the weather and the kind of plant. As a rule, the plants with double flowers last considerably longer than do those varieties with single flowers.

The length of time that plants like the flowering crabapple can be enjoyed depends particularly upon the weather. Many are more interesting in bud than in full flower, and if there is a long period of cool, cloudy weather when the buds are full but not open, they may remain in good condition for some time and so may be colorful and
effective for two weeks or more. On the other hand, if a warm hot spell forces the buds to open at once, the flowers may fade in less than a week. Since these conditions vary considerably, those interested in using such plants must study them carefully and consider local conditions as a basis for determining the length of time the flowers may be expected to be of ornamental value.

Wherever possible, yearly records have been kept of individual plants, since one individual of the same variety, growing in a warm, sunny spot, will undoubtedly bloom earlier than another which is more exposed. The following list is based on blooming dates in Boston and has been correlated with records kept by Professor J.G. Jack of the Arnold Arboretum between 1887 and 1893. Because of lack of space, a majority of the varietal names have not been given. Among the large number of Japanese cherries and the hybrid lilacs, there are some varieties that do bloom earlier than others, but this is a study in itself. Not all the plants listed are of value for their flowers, but they have simply been included as a matter of record. A plant is listed only for the particular date when it is in full bloom from the landscape point of view, although its flower buds might be rather conspicuous for several days previous to full bloom. As an example *Pieris floribunda* and *P. japonica* are listed only once each in the following list, yet the flower buds of both are conspicuous a greater part of the late winter. Consequently, it is not to be considered that hard and fast date lines are set up in the following list, but the general sequence and the association of plants blooming together should be of particular value to all interested in woody trees and shrubs.

**ORDER OF BLOOM**

**February**
- *Hamamelis vernalis*

**March**
- *Acer saccharinum*
- *Hamamelis japonica*
- *Hamamelis mollis*

- *Prinsepia sinensis buds opening*
- *Salix species* (Snowdrop & Crocus)

**Early April**
- *Acer rubrum*
- *Alnus incana* "rugosa"
- *Cornus mas*
- *Cornus officinalis*
- *Corylus species*
- *Daphne mezereum*
- *Erica carnea*
- *Forsythia ovata*
- *Jasminum nudiflorum*

[ 55 ]
Lonicera fragrantissima
" praeflorens
" standishi
Pieris japonica

Populus species
Prunus davidiana
Rhododendron dauricum
Viburnum fragrans

Mid-April

Abeliophyllum distichum
Acer negundo
Berberis thunbergi (leaf buds opening)
Betula species
Cercidiphyllum japonicum
Corylopsis species
Dirca palustris
Epigaea repens
Forsythia europaea
" intermedia vars.
" suspensa
Forsythia viridissima
Lindera benzoin
Lonicera morrowi and L. tatarica leaf buds opening
Pieris floribunda
Rhododendron mucronulatum
Salix blanda leaf buds opening
Shepherdia argentea " canadensis leaf buds opening
Viburnum sieboldi
Ulmus americana

Late April

Acer circinatum
" diabolicum purpurascens
" platanoides
Aesculus species, leaves well advanced
Euptelea francheti
" polyandra
Larix species leaf buds opening
Lonicer a altmanni pilosi ucla
" coerulea edulis
" tenuipes
Maddenia hypoleuca
Magnolia denudata
" kobus
" " borealis
" stellata
Malus baccata mandshurica
Myrica gale
Prinsepia sinensis
Prunus apetala
" armeniaca
Prunus canescens
" cerasifera
" concinna
" cyclamina
" dasycarpa
" fenziana
" incisa
" " serrata
" mandshurica
" nigra
" nipponica
" sargenti
" salicina
" simoni
" subhirtella and varieties
" tomentosa
" tomentella
" triloba
" yedoensis
Vinca minor and varieties

[56]
Early May

Acer saccharum
Alyssum gemonense
Amelanchier species
Andromeda glaucophylla
Chamaedaphne calyculata
Crataegus arnoldiana
Chaenomeles japonica
Chaenomeles lagenaria vars.
Cydonia oblonga
Cytisus beanii
   "  decumbens
   "  elongatus
Daphne cneorum
   (Dandelion)
Forestiera acuminata
Iberis tenoreana
Ledum groelandicum
Leitneria floridana
Lonicera canadensis
   "  coerulea
   "  gracilipes
   "  sacata
Magnolia salicifolia
Magnolia soulangeana vars.
Malus astracanica
   "  brevipes
   "  micromalus
Mahonia aquifolium
   (Narcissus)
Nemopanthus mucronata
Phlox subulata
   (Primula elatior superba)
   "  polyantha
Prunus allegheniensis
   "  americana
   "  avium
   "  cerasus
   "  domestica
   "  fontanesiana
   "  hortulana
Prunus incana
   "  lanata
   "  maritima
   "  maximowiczii
   "  munsoniana
   "  orthosepala
   "  padus and varieties
   "  persica
   "  serrulata (many double
flowered forms starting to
bloom and continuing for two
weeks at least, depending on
the variety, some being slight-
ly earlier than others.)
Prunus slavini
Pyrus amygdaliformis
   "  communis and varieties
   "  michauxii
   "  serotina
   "  salicifolia
Rhododendron mucronatum
   "  venustum
Ribes alpestre
   "  alpinum
   "  aureum
   "  diacantha
   "  gordonianum
   "  inebrians
   "  irriguum
   "  odoratum
   "  orientale heterotrichum
   "  pinetorum
   "  robustum
   "  setosum
   "  tenuipes
Spiraea arguta
   "  chamaedryfolia ulmifolia
   "  hypericifolia acuta
   "  media
   "  multiflora
Spiraea pikoensis
" prunifolia
" " plena
" thunbergi
(Tulips)
Vaccinium species
Viburnum alnifolium

Aesculus carnea
" hippocastanum
Akebia lobata
" quinata
Alyssum gemonense
" saxatile
Amelasorbus jacki
Aristolochia mandshuriensis
Aubretia deltoidea
Berberis dictyophylla
" dielsiana
" stenophylla
" thunbergi
Berberis vulgaris
Calycanthus floridus
Caragana species
Cercis canadensis
" chinensis
Coriaria japonica
Cornus florida
Coronilla emeroides
Cytisus praecox
" purgans
" purpurea
" ratisbonensis
" rocheli
" scoparius
" triflorus
Daphne caucasica
" cneorum
Elaeagnus multiflora
Enkianthus perulatus
Euonymus alata

Viburnum beteuensis
" buddleifolium
" burejaeticum
" shenarianum
(Violets)
Xanthorrhiza simplicissima
Zanthoxylum americanum

Mid-May
Exochorda giraldii
" korolkovi
" macrantha
" grandiflora
" racemos
Forestiera neo-mexicana
Fothergilla species
Halesia carolina
" monticola
Kerria japonica
Lonicera alpigena
" gibбiflora
" microphylla
" muendeniensis
" syringantha
" " wolfi
" thibetica
" xylosteum
Magnolia fraseri
" liliflora nigra
Malus adstringens
" arnoldiana
" atrosanguinea
" baccata
" denticulata
" floribunda
" glabrescens
" halliana parkman
" huphehensis
" prunifolia
" pumila niedzwetzkyana
" purpurea
Malus robusta
" sieboldi
" soulardi
" spectabilis
" zumi calocarpa
Pachysandra terminalis
(Papaver orientale)
Potentilla fruticosa friedrichseni
Prinsepia uniflora
Prunus angustifolia watsoni
" glandulosa and varieties
" grayana
" institutia
" maacki
" mexicana
" persica, double flowered varieties
" pumila susquehannae
" sieboldi
" virginiana
Quercus species
Rhododendron canadense
" carolinianum
" fraseri
" obtusum amoenum
" obtusum arnoldianum
" obtusum "Hinodegiri"
" obtusum kaempferi
" reticulatum
" schlippenbachii
" vaseyi

(Acer ginnala
Aronia arbutifolia
Assimina triloba
Berberis amurensis
" juliana
" verna
" verruculosa
" vulgaris
(Buttercup)

R. yedoense poukhanense
Rhodotypos scandens
Rhus canadensis
Ribes fasciculatum
" sanguineum
" pinetorum
Rosa primula
Sambucus pubens
Sibiraea laevigata
Spiraea canescens
" gemmata
" hypericifolia
" inflexa
" mollifera
" oxyodon
" pubescens
Syringa hyacinthiflora vars.
" oblata dilatata
" " giraldi
" pinnatifolia
" vulgaris; with approximately 300 varieties. It is impossible to list them here as "Early," "Medium or "Late," though some might be so listed.
Viburnum carlesi
" lantana
" mongolicum
" wrightii
Weigela "Fleur de Mai"

Late May

Ceanothus ovatus
Celastrus species
Chaenomeles lagenaria
" Kermisina semiplena"
Cornus alternifolia
" controversa
" stolonifera
Coronilla emeroides
Cotoneaster adpressa
Cotoneaster multiflora

“racemiflora

Crataegus oxyacantha

“pruniflora

“punctata

Daphne giralda

(Daylilies)

Deutzia candelabrum

“gracilis

“hypoleuca

“lemoinei & varieties

“parviflora

“rosea and varieties

Elaeagnus longipes

“umbellata

Enkianthus campanulatus

“deflexus

Fendlera wrighti

Genista pilosa

Iberis sempervirens

Juglans sieboldiana

Leucothe racemosa

Lonicera amoena

“bella rosea

“chrysantha

“korolkowi

“maacki

“morrowi

“punicea

“tartarica and varieties

Magnolia cordata

“glauca

“soulangeana lennei

“tripetala

Malus angustifolia

“bracteata

“coronaria

“charlottae

“dulca

“glaucescens

“ioensis

Malus ioensis plena

“sargenti

“spectabilis riversi

“sylvestris

“scheideckeri

“toringoides

Neilla sinensis

Paonia suffruticosa

Petteria ramentaceae

Philadelphus hirsutus

“schrenki

Photinia villosa

Physocarpus amurensis

“monogynus

Prunus laurocerasusschipkaensis

“pennsylvanica

“serotina

Rhamnus cathartica

Rhododendron atlanticum

R. catawbiense “Albert”

R. “Boule de Neige”

R. “Charles Dickens”

R. “Daisy”

R. “Mont Blanc”

R. catawbiense “Viola”

R. fortunei “Duke of York”

R. japonicum

R. gandavense hybrids

R. molle hybrids

R. nudiflorum

R. roseum

R. smirnowi

Robinia elliottii

“fertilis

“hispida

“kelseyi

“slavini

Rosa acicularis engelmanni

“hugons

“spinosissima and vars.

“xanthina
Rubus deliciosus
Smilax rotundifolia
Spiraea blanda
  " blumei
  " cantoniensis
  " chamaedryfolia
  " cinerea
  " nipponica
  " trilobata
  " vanhouttei
  " wilsoni
Staphylea colchica
  " trifolia
Styrax obassia
Symplocos paniculata
Syringa chinensis
  " julianae
  " meyeri
  " microphylla
  " persica
  " pinetorum
  " potanini
  " pubescens
Syringa velutina
  " vulgaris and many varieties
  " wolffii
  " yunnanensis
Tamarix parviflora
Thymus serpyllum
Vaccinium corymbosum
Viburnum affine
  " erosum
  " lentago
  " macroecephalum
  " opulus roseum
  " rhytidophyllum
  " rufidulum
  " sieboldii
  " tomentosum
  " " " xanthoneura wilsoni
  " " " trilobum
Weigela, several species & many varieties
Wisteria species and vars.

**Early June**

Actinidia arguta
Buddleia alternifolia
Chionanthus retusus
  " virginicus
Cladrastis lutea
Clematis glauca angustifolia
  " recta
Colutea species
Cornus alba
  " kousa chinensis
  " rugosa
Cotinus coggyria
Crataegus cordata
  " crus-galli
  " oxyacantha pauli
Daphne pontica
Decaisnea fargesii

Elaeagnus angustifolia
Euonymus atropurpurea
Genista hispanica
Genista tinctoria
Helianthemum nummularium
Hydrangea petiolaris
  " xanthoneura wilsoni
Idesia polycarpa
Ilex opaca
  " verticillata
Jamesia americana
Kolkwitzia amabilis
Laburnum species
Leucothoe catesbaei
Lonicera maackii podocarpa
  " minutiflora
  " ruprechtiana
Lonicera xylosteoides
Lycium species
Magnolia parviflora
Phellodendron amurense
Philadelphus schrenki
Physocarpus amurensis
     "  intermedia
     "  opulifolius
Potentilla fruticosa varieties
Pterostyrax hispida
Rhamnus frangula
Rhododendron arbutifolium
     "  calendulaceum
     "  catawbiense and
     "  many vars.
     "  ferrugineum
R. minus
Rhus potanini
Robinia hartwigi
     "  pseudoacacia
Rosa acicularis
     "  arnoldiana
     "  blanda
     "  canina
     "  foetida harrisoni
     "  "  persiana
Rosa multiflora
Rosa rugosa
     "  spinosissima
     "  virginiana
     "  webbiana
     "  willmottiae
Sassafras albidum
Sorbus aucuparia
Spiraea dasyantha
     "  trichocarpa
Staphylea pinnata
Styrax americana
     "  japonica
Syringa henryi varieties
     "  josikaea varieties
     "  komarowi
     "  prestonae and varieties
     "  reflexa
     "  sweiginzowi
     "  tomentella
     "  villosa
     "  wilsoni
Viburnum cassinoides
     "  dentatum
     "  dilatatum
     "  opulus
     "  prunifolium
     "  sargenti

Mid-June
Amorpha fruticosa
Castanea pumila
Catalpa speciosa
Ceanothus pallidus rosea
Celastrus scandens
Colutea arborescens
Cornus amomum
     "  bretschneideri
     "  coreana
     "  kousa
     "  racemosa
Cytisus supinus
Deutzia scabra and varieties
Diospyros virginiana
Euonymus europaea
     "  fortunei vegeta
Gymnocladus dioica
Hydrangea bretschneideri
Ilex glabra
Kalmia angustifolia
     "  latifolia
Ligustrum obtusifolium
     "  "  regelianum
     "  vulgare
Liriodendron tulipifera
Lonicera browni
     "  iberica
     "  japonica halliana
     "  periclymenum
Periploca sepium
Philadelphus coronarius
     "  cymosus varieties
Philadelphus inodorus
   "  grandiflorus
   "  laxus
   "  lemoinei and
       varieties
   "  maximus
   "  pubescens
   "  tomentosus
   "  virginalis and
       varieties

"Rosa arvensis
   "  dahurica
   "  jacksonii
   "  micrantha
   "  multiflora cathayensis
   "  rubifolia
   "  rugosa kamtschatica
   "  "  repens

Rubus allegheniensis
Sophora vicifolia
Spiraea henryi

Spiraea menziesii
   "  nipponica rotundifolia
   "  ventchii
Symphoricarpos racemosus laev-
       igatus
Syringa amurensis
   "  "  japonica
   "  "  pekinensis
Tilia platyphyllos
   "  tomentosa
Vaccinium stamineum
Viburnum acerifolium
   "  dilatatum hispidum
   "  erosum
   "  molle
   "  pubescens
Weigela "Congo"
Xolisma ligustrina
   "  mariana
Zenobia pulverulenta

Late June

Acanthopanax sieboldianus
   "  senticosus
Actinidia polygama
Amorpha glabra
Cornus macrophylla
Cotoneaster salicifolia
Cytisus albus
   "  supinus
Deutzia myriantha
Genista anglica
Halmodendron halodendron
Ilex crenata
Indigofera decora
   "  kirilowii
   "  potanini
Itea virginica
Lonicer henryi
Periploca graeca
Rhododendron arborescens
Rhododendron maximum
Rhus typhina
Rosa anemoniiflora

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Early July

Buddleia japonica
Castanea species
Cytisus nigricans
Holodiscus discolor
Indigofera amblyantha

Aesculus parviflora
Amorpha brachycarpa
Berberis aggregata
Catalpa ovata
Ceanothus americanus
Clematis jackmanii
Diervilla lonicera
Hydrangea arborescens grandiflora

Hydrangea arborescens "albiflora"
"paniculata praecox"
"quercifolia"
"serrata"

Hypericum aureum

Hypericum kalmianum
Koelreuteria paniculata
Lespedeza bicolor
Lonicera sempervirens
Martensia erecta
Rhododendrum viscosum
Securinega ramiflora
Sorbaria sorbifolia
Sphaeralcea remota

Mid-July

Maackia amurensis
Rhus glabra
Rosa setigera
Spiraea billiardi

Hypericum prolificum
Indigofera pulchella
Ligustrum quihoui
Nandina domestica
Oxydendrum arboreum
Sorbaria arborea

Koelreuteria paniculata
"speciosa"
Ceanothus americanus

Clematis virginiana
"vitalba"

Evodia danielli
Hibiscus syriacus varieties

Hydrangea arborescens
"macrophylla"
"paniculata"
"grandiflora"

Lonicera involucrata serotina
Nandina domestica
Oxydendrum arboreum
Sorbaria arborea

Spiraea bumalda "Anthony Waterer"

Late July

Albizzia julibrissin rosea
Aralia spinosa
Buddleia albiflora
Callicarpa species
Calluna vulgaris and varieties
Campsis radicans
Cephalanthus occidentalis
Clethra acuminata
"alnifolia"

Hydrangea radiata

Hypericum dawsonianum
Lespedeza buergeri praecox
"cyrtobotrya"
Lonicera heckrotti
Paulownia tomentosa
Polygonum auberti
Sophora japonica

Vitex agnus-castus
"negundo incisa"

Spiraea amblyantha

Abelia grandiflora
Buddleia davidi magnifica
Clematis virginiana

Hydrangea arborescens
"macrophylla"
"paniculata"
"grandiflora"

September

Clematis paniculata
Clerodendron trichotomum

Elsholtzia stauntonii
Franklinia altamaha

October

Donald W. MAN

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