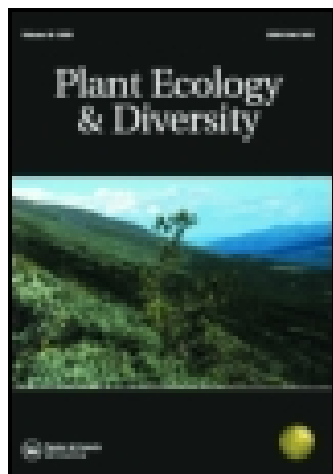


This article was downloaded by: [Virginia Tech Libraries]

On: 14 March 2015, At: 00:11

Publisher: Taylor & Francis

Informa Ltd Registered in England and Wales Registered Number:
1072954 Registered office: Mortimer House, 37-41 Mortimer Street,
London W1T 3JH, UK



Transactions of the Botanical Society of Edinburgh

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/tped18>

Report on Temperatures and Open-Air Vegetation at the Royal Botanic Garden, Edinburgh, from July 1886 to June 1887

Robert Lindsay^a

^a Garden

Published online: 01 Dec 2010.

To cite this article: Robert Lindsay (1889) Report on Temperatures and Open-Air Vegetation at the Royal Botanic Garden, Edinburgh, from July 1886 to June 1887, Transactions of the Botanical Society of Edinburgh, 17:1-4, 121-132, DOI: [10.1080/03746608909468336](https://doi.org/10.1080/03746608909468336)

To link to this article: <http://dx.doi.org/10.1080/03746608909468336>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings,

demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

Callithamnion polyspermum.	Gigartina mammosa.
Ceramium rubrum and acanthonotum.	Rhodymenia palmata.
Iridæa edulis.	Gelidium corneum.
Furcellaria fastigiata.	Plocamium coccineum.
Chondrus crispus.	Delesseria sinuosa.
	Laurentia pinnatifida.

*Report on Temperatures and Open-Air Vegetation at the Royal
Botanic Garden, Edinburgh, from July 1886 to June
1887. By ROBERT LINDSAY, Curator of the Garden.*

July 1886.—The month of July was rather cold and wet for the season of the year. Rain fell more or less on sixteen days. A few really warm days occurred during the first week, after which showers and dull weather occurred frequently till the end of the month. The lowest night temperature was 38°, which occurred on the 27th, and the highest 52°, on the 2nd. Herbaceous plants and annuals flowered remarkably well. Roses were also good during the last week of the month. On the Rock Garden 282 species and varieties of plants came into flower during July, amongst which the following were conspicuous:—*Heuchera sanguinea*, *Cyananthus lobatus*, *Saponaria cæspitosa*, *Cacalia alpina*, *Myosotis capitata*, *Tropæolum polyphyllum*, *Meconopsis Wallichii*, *Phyteuma comosum*, *Pentstemon speciosus*, *Epilobium obcordatum*, *Chrysogonum virginianum*, *Aristolochia rotunda*, *Spiræa astilboides*, *S. bullata*, *Lilium Kramerii*, *Galium rubrum*, *Calochortus pulchellus*, *Micromeria piperella*, *Veronica amplexicaulis*, &c.

August.—During this month the weather was fairly good; there were nineteen dry days, and the wind was westerly throughout.

Several low night temperatures were registered. The lowest were—on the 1st, 40°; 3rd, 36°; 4th, 37°; 5th, 38°; 15th, 39°; The highest morning readings were—on the 6th, 67°; 20th, 68°; 28th, 63°; 29th, 70°; 30th, 66°. Eighty-six species of plants came into flower on the Rock Garden during August, amongst which were the following, viz.:—*Campanula isophylla alba*, *Hypericum chinense*, *Umbilicus sempervivum*, *Erica ramulosa*, *Calluna vulgaris* fl.-pl., *Olearia Haastii*, *Potentilla Leschenaultii*, *Cyclamen hederifolium*,

Centaurea alpina, *Saxifraga fimbriata*, *Statice minima*, *Digitalis ferruginea*, *Scabiosa graminifolia*, &c.

The Rock Garden was very gay during this month; a large number of the plants which began to flower in July continued longer than usual, in consequence of there being no great heat. Artificial watering was at no time required.

September.—The weather was, on an average, favourable, being dry, but rather cold. The first frost this season occurred on the morning of the 15th, when the thermometer fell to 29°, and on the following morning it registered 32°. Dahlias, and a few other tender plants were injured, but not altogether destroyed. Potatoes were also blackened in some districts. No more frost occurred during this month, the lowest readings being 35° on the 19th, and 36° on the 23rd. The highest morning readings were—on the 1st, 65°; 6th, 65°; 8th, 62°; 9th, 60°; 30th, 62°. The season has been favourable for transplanting, and outdoor operations have had but little interruption throughout the month. On the Rock Garden twenty-four species of plants came into bloom, amongst which were *Hypericum patulum*, *Morina Coulteri*, *Tricyrtis australis*, *Polygonum capitatum*, *Colchicum maximum*, *Gladiolus Saundersii*, *G. purpureo-auratus*, *Oxalis lobata*, *Polemonium flavum*, *Kniphofia MacOwani*, *Colchicum autumnale album* fl.-pl., *Lilium tigrinum*, *Oenothera rivularis*.

October.—This month was remarkable for the absence of frost; only once did the thermometer reach the freezing point, viz., on the 23rd; while in October 1885 frost was registered on four nights, indicating 20° in all. In consequence of the mildness of the season, a large number of autumn flowers are still in fairly good condition—Dahlias, Pelargoniums, Lobelias, Calceolarias, and other tender plants are in flower in the open ground up to the present date, but they are somewhat battered by the severe storms of wind and rain they have undergone. Autumnal tints on deciduous trees and shrubs have been less interesting than usual. Very few have coloured well; the best were species of Maple, Oak, and *Liriodendron*, while many others were scarcely coloured at all, the leaves having fallen or been blown off in an immature condition. The brown tints which many Conifers assume at this season are as yet absent. Want of heat and sunshine during the growing season,

causing insufficient ripening, appears to have brought about this result, and from the same cause Rhododendrons, Azaleas, and other Ericaceous plants are but poorly set with flower-buds for next year. Fruit-bearing trees and shrubs have, as a rule, produced moderate crops; the best are Hollies, Cotoneasters, Roses, and *Prunus lusitanica*—the latter is unusually abundant this season.

The lowest readings of the thermometer occurred on the 6th, 34°; 11th, 33°; 13th, 37°; 22nd, 35°; 23rd, 32°. The highest morning readings were—on the 1st, 59°; 2nd, 56°; 6th, 53°; 7th, 56°; 8th, 56°. Rain fell on eighteen days, and there were severe thunderstorms and violent gales in the middle of the month.

On the Rock Garden many plants were in flower. Only sixteen, however, opened their first flowers during October, the best of which were *Armeria canescens*, *Aster longifolius*, *Crocus medius*, *asturicus*, *byzantinus*, *Shrundi*, and *pulchellus*; *Dianthus arenarius*, *Helleborus altifolius*, *Tricyrtis hirta*. *From 1st January till the end of October 1161 species and varieties have flowered on the Rock Garden; at the same date last year 1168 had flowered.*

November.—This month has been very mild and dry generally. Seldom have we had so little frost to record for the time of year, while throughout the month has been most favourable for all outdoor gardening work. The thermometer was at or below the freezing point on ten mornings, indicating collectively 17° of frost, as against 65° for the corresponding month last year. The lowest readings occurred on the 18th, when the glass registered 30°; 19th, 30°; 21st, 30°; 22nd, 26°; 26th, 30°. The highest morning readings were on the 1st, 45°; 2nd, 45°; 3rd, 50°; 15th, 48°; 24th, 48°. Rain fell on ten days, and the prevailing winds were westerly. During the first week of the month severe storms of wind took place, which cleared off, with but few exceptions, any leaves that still remained on deciduous trees. Many autumn flowering plants and annuals have had their flowering season prolonged to an extent quite unprecedented. At the end of the month large numbers were still in blossom. Early spring bulbs, such as Snowdrops, Scillas, Narcissi, and others, are already pushing through the soil, showing that a considerable amount of growth has taken place. Amongst the finest

plants in flower out-of-doors during the month were *Primula capitata*, very dark seedling forms; Christmas Roses of different kinds, Chrysanthemums, and *Jasminum nudiflorum*.

For the handsome varieties of *Primula capitata* we are indebted to Dr King, of Calcutta, one of the local secretaries of the Society, who, in December last, sent to the garden a valuable collection of rare Indian Primrose seeds. Many of the species are entirely new to European gardens. The seeds were gathered in high elevations of the Sikkim Himalayas. Nearly all the kinds have germinated and grown well at the garden, a few have already flowered, but we may expect to see them in greater perfection next spring. The most conspicuous shrubs in fruit were the various Hollies, Cotoneasters, Euonymus, and Snowberries.

The following plants came into flower on the Rock Garden during November, viz.:—*Aster Reevesii*, *Eucomis punctata*, *Gynierium argenteum*, *Helleborus olympicus*, *H. o. albus*, and *H. purpurascens* variety.

December.—The weather of the past month has been of an exceedingly wintry character. The aggregate amount of frost registered has not been exceeded during any December since 1879.

The thermometer was at or below the freezing point on twenty-six mornings, indicating collectively 174° of frost. During the corresponding month of 1885 frost was registered on fourteen mornings, the collective amount being 111° . The lowest readings for last month were, on the 3rd, 18° ; 18th, 18° ; 19th, 18° ; 20th, 14° ; 21st, 16° . The highest morning readings were, on the 5th, 40° ; 6th, 42° ; 9th, 37° ; 16th, 35° . There were slight falls of snow and sleet throughout the month, the heaviest being on the 1st and 8th, but at no time was there enough to do any harm. The excessive fall of the barometer on the night of the 8th, when it reached the extremely low point of 27.668 inches, was happily unattended by any bad results in this district. Holly and other fruits were eagerly devoured by birds, owing to the combined hardness of the ground and scarcity of other food; by the end of the month nearly all had disappeared. Not a single plant came into flower in the Rock Garden during December.

The total number of species and well-marked varieties of alpine and dwarf-growing herbaceous plants which have flowered

in the Rock Garden during the past year amounts to 1165. This is considerably below the number cultivated in the garden, as many of the rarer species fail to flower every year, but it gives a good idea of the large number of alpine plants which may be successfully grown in this country. A record has been kept showing the date when each plant was first observed in flower. The largest numbers flowered during June and July, viz., 300 and 281 respectively.

January 1887.—The weather was upon the whole favourable. Frost was registered on seventeen mornings, indicating collectively 91° for the month, as against 158° for the corresponding month last year. The lowest readings of the thermometer occurred on the 5th, 23° ; 6th, 23° ; 11th, 22° ; 15th, 19° ; 17th, 18° . The highest morning readings were, on the 19th, 48° ; 26th, 47° ; 27th, 49° ; 29th, 46° ; 30th, 47° . The lowest day temperature was 31° , which occurred on the 5th, and the highest 53° , on the 27th of the month. Comparatively mild spring-like weather ensued from the 17th till the end of the month, which has brought forward the leaf-buds of many shrubs, particularly Flowering Currant, Roses, Honeysuckles, Lilacs, &c. Several herbaceous plants have started into growth. So far very little injury has been done to vegetation this winter. Of the forty selected plants, whose dates of flowering are annually recorded to the Society, five came into flower during January, viz.:—*Dondia Epipactis*, on the 13th; *Tussilago fragrans*, on the 19th; *Corylus Avellana*, on the 26th; *Galanthus nivalis*, on the 27th; and *Galanthus plicatus* on the 31st. None of these had opened by the end of January last year. On the Rock Garden nineteen species came into flower, amongst which were *Geum aureum*, *Hepatica triloba* and *angulosa*, *Primula acaulis*, *veris*, *Aubrietia deltoidea*, *Crocus Imperati* and *suaveolens*, *Erica herbacea alba*, and three species of *Helleborus*.

February.—The month was generally mild and dry; bright sunshine was frequent, causing numerous spring plants to expand their flower-buds earlier than usual. The weather experienced during the month was in marked contrast to that of February 1886, which was extremely wintry, with much snow, and uninterrupted low temperatures. During last month no snow fell. Rain fell, more or less, on

nine days only. Frost was registered on twelve mornings, the total amount being 76° , as against 128° for the corresponding month last year.

The lowest readings of the thermometer were on the mornings of the 6th, 7th, 8th, 9th, and 10th, indicating respectively 23° , 23° , 22° , 17° , and 20° . The highest morning temperatures were on the 3rd, 18th, 23rd, 24th, and 27th, when 46° , 45° , 49° , 50° , and 44° were indicated. The lowest day reading was 31° on the 8th; the highest was 58° , on the 27th of the month. Of the forty spring flowering plants, whose dates of flowering are annually recorded, the following seventeen came into flower, viz.:—*Tussilago alba*, on February 3; *Crocus Susianus*, February 4; *Eranthis hyemalis*, February 4; *Daphne Mezereum*, February 5; *Leucoium vernum*, February 14; *Symplocarpus foetidus*, February 14; *Scilla præcox*, February 16; *Rhododendron atrovirens*, February 17; *Crocus vernus*, February 17; *Nordmannia cordifolia*, February 18; *Bulbocodium vernum*, February 19; *Scilla sibirica*, February 19; *Iris reticulata*, February 26; *Rhododendron Nobleanum*, February 26; *Scilla bifolia taurica*, February 27; *Arabis albida*, February 27; *Omphalodes verna*, February 28. All but two of these have flowered earlier than last season, the average being seventeen days in advance. Several shrubs have flowered most profusely during the month; the finest were the red and white *Mezereon*, *Rhododendron atrovirens* and *R. præcox*, *Andromeda floribunda*, &c. Leaf-buds are not developing so rapidly as might have been expected, probably owing to the dryness of the ground.

On the Rock Garden forty-five species and varieties of plants came into flower during the month, as against twenty during February 1886. The most conspicuous varieties were—*Hepatica triloba*, *Galanthus Elwesii* and *Redoutei*, *Crocus annulatus*, *C. biflorus*, *etruscus*, *Olivieri*, *Susianus*, *Sieberi*, and *vernus*; *Helleborus antiquorum*, *albicans major*, *orientalis*, *guttatus*; *Leucoium vernum* and *carpathicum*, *Cyclamen Coum vernum*, *Colchicum crociflorum*, *Iris reticulata* and *Krelagei*, *Chionodoxa sardensis*, *Saxifraga oppositifolia* and *alba*, *S. Burseriana*, *Rocheliana*, *Muscari lingulatum*, *Scilla bifolia taurica*, *Bulbocodium vernum*, *Scilla sibirica*, *Draba aizoon*, *Doronicum caucasicum*.

March.—The weather was rough, with much snow, wind, and frequent frosts. Vegetation, having been forced on by the unusual mildness of the preceding month, suffered a severe check, and made little progress till near the end of the month. Compared with last year, the season is still considerably in advance. The thermometer was at or below the freezing point on eighteen nights, and 100° of frost were registered for the month as against 134° for the corresponding month last year.

The lowest readings of the thermometer were, on the 12th, 24°; 13th, 18°; 14th, 24°; 15th, 23°; 21st, 24°. The highest morning readings were, on the 2nd, 42°; 3rd, 44°; 7th, 35°; 27th, 39°; 31st, 39°. The lowest day temperature was 29°, which occurred on the 11th, and the highest 52°, on the 30th.

Flowers of *Rhododendron præcox*, *R. Nobleanum*, and *R. atrovirens* were much injured by the frost on the 9th; Roses, which had started into growth, had their young leaves slightly browned; no other injury was observed. Snow fell more or less from the 10th till the 22nd, which helped to protect spring-flowering plants. Thorns, Poplar, and Lilac were well advanced in leaf. Willows, Alder, Elms, *Pyrus japonica*, *Ribes sanguineum*, and *Forsythia viridissima* were flowering profusely. *Magnolia* and *Prunus triloba* were well set with flower-buds. Spring-flowering bulbous plants were vigorous and flowering well, although cold drying winds and absence of anything like genial rains was beginning to tell on them.

On the Rock Garden a large number of plants flowered. Sixty-five species came into bloom during March, exclusive of those which opened in the previous month, many of which are still flowering. Among the most interesting which opened in March were the following, viz.:—*Corydalis angustifolia*, *Primula denticulata*, *Erica carnea*, *Chionodoxa Lucilæ*, *Saxifraga sancta*, *S. oppositifolia* var. *aretioides*, *S. Burseriana* var. *Boydii*, *Puschkinia scilloides*, *Polygala Chamæbuxus* and *purpurea*, *Pachystema Canbyi*, *Draba Marwei*, *Anemone Pulsatilla*, &c.

Of the forty spring-flowering plants whose dates of flowering are annually recorded to the Society the following fifteen came into flower, viz.:—

Scilla bifolia, . . .	Mar. 2	Aubrietia grandiflora, . Mar. 19
Mandragora officinalis, . .	2	Erythronium Dens-canis, „ 10
Scilla bifolia alba, . .	4	Hyoscyamus Scopolia, . „ 23
Sisyrinchium grandi-		Narcissus Pseudo-Nar-
florum, . . .	4	cissus, . . . „ 23
Orobus vernus, . . .	6	Ribes sanguineum, . „ 23
Sisyrinchium grandi-		Corydalis solida, . . „ 26
florum album, . . .	8	Draba aizoides, . . „ 28
Narcissus pumilus, . .	14	Adonis vernalis, . . „ 29

April.—During the month of April vegetation made comparatively slow progress. Frost occurred much more frequently than it has done for many years during the same period. This, along with a succession of dry cold easterly winds, prevented any very rapid growth from taking place.

The ground also was very dry, until the last week of the month, when a moderate supply of rain fell. This did much good in assisting deciduous trees and shrubs to develop their leaves, but the temperature remained too cold for plants generally deriving the full benefit of the rain. The thermometer was at or below the freezing point on fifteen nights; collectively 58° of frost were registered for the month, as against 15° for the corresponding month last year. The lowest readings were—on the 5th, 24°; 10th, 24°; 15th, 26°; 17th, 27°; 27th, 26°. The highest morning readings were—on the 2nd, 50°; 3rd, 50°; 17th, 50°; 22nd, 50°; 28th, 49°. The lowest day temperature was 44°, which occurred on the 5th, and the highest 62°, on the 17th of the month. The total amount of frost registered this season up to the end of April is 520°; for the same period last season 632° were registered. The following is the distribution for each month, viz., September, 3°; October, 1°; November, 17°; December, 174°; January, 91°; February, 76°; March, 100°; and April, 58°. The lowest point reached at the garden this season was 14° Fahr., or 18° of frost, which occurred on 20th December last.

Register of Spring-Flowering Plants, showing Dates of Flowering at the Royal Botanic Garden, Edinburgh, during the years 1886 and 1887.

No.	Name of Plants.	First Flowers opened.	
		1886.	1887.
1	<i>Adonis vernalis</i> ,	April 3	March 29
2	<i>Arabis albida</i> ,	March 4	Feb. 27
3	<i>Aubrietia grandiflora</i> ,	April 6	March 19
4	<i>Bulbocodium vernum</i> ,	Feb. 27	Feb. 19
5	<i>Corydalis solida</i> ,	April 6	March 26
6	<i>Corylus Avellana</i> ,	Feb. 10	Jan. 26
7	<i>Crocus Susianus</i> ,	Feb. 12	Feb. 4
8	„ <i>vernus</i> ,	March 17	Feb. 17
9	<i>Daphne Mezereum</i> ,	March 22	Feb. 5
10	<i>Dondia Epipactis</i> ,	{ Dec. 30 } 1885.	Jan. 13
11	<i>Draba aizoides</i> ,	March 31	March 28
12	<i>Eranthis hyemalis</i> ,	Feb. 10	Feb. 4
13	<i>Erythronium Dens-canis</i> ,	March 26	March 19
14	<i>Fritillaria imperialis</i> ,	April 25	May 4
15	<i>Galanthus nivalis</i> ,	Feb. 9	Jan. 27
16	„ <i>plicatus</i> ,	Feb. 9	Jan. 31
17	<i>Hyoscyamus Scopolia</i> ,	April 3	March 23
18	<i>Iris reticulata</i> ,	March 20	Feb. 26
19	<i>Leucoium vernum</i> ,	Feb. 17	Feb. 14
20	<i>Mandragora officinalis</i> ,	April 3	March 2
21	<i>Narcissus Pseudo-Narcissus</i> ,	April 6	March 23
22	„ <i>pumilus</i> ,	March 25	March 14
23	<i>Nordmannia cordifolia</i> ,	March 20	Feb. 18
24	<i>Omphalodes verna</i> ,	April 3	Feb. 28
25	<i>Orobis vernus</i> ,	March 28	March 6
26	<i>Rhododendron atrovirens</i> ,	March 23	Feb. 17
27	„ <i>Nobleanum</i> ,	April 4	Feb. 26
28	<i>Ribes sanguineum</i> ,	April 8	March 23
29	<i>Scilla bifolia</i> ,	March 19	March 2
30	„ „ <i>alba</i> ,	March 21	March 4
31	„ <i>præcox</i> ,	Feb. 13	Feb. 16
32	„ <i>sibirica</i> ,	Feb. 17	Feb. 19
33	„ <i>taurica</i> ,	March 20	Feb. 27
34	<i>Sisyrinchium grandiflorum</i> ,	March 21	March 4
35	„ <i>album</i> ,	March 21	March 8
36	<i>Symphytum caucasicum</i> ,	April 20	April 10
37	<i>Symplocarpus foetidus</i> ,	March 23	Feb. 14
38	<i>Tussilago alba</i> ,	Feb. 10	Feb. 3
39	„ <i>fragrans</i> ,	Feb. 6	Jan. 19
40	„ <i>nivea</i> ,	April 3	April 4

On the Rock Garden 159 species and varieties came into flower during April, being forty in excess of last April. Amongst the most interesting were *Anemone apennina*, *Androsace Laggerii*, *Aubrietia Hendersoni* and *Campbelli*, *Arum proboscideum*, *Cheiranthus Menziesii*, *Corydalis nobilis*, *Erythronium giganteum* and *roseum*, *Gentiana verna*, *Menziesia cœrulea* and *empetriformis*, *Muscari Argæi*, *Iberis petrœa*, *Nar-*

cissus rupicola, *Petrocallis pyrenaica*, *Primula decora*, *frondosa*, *minima*, *glabra*, *involuta*, *Reidii*; *Pulmonaria* sp., *Ranunculus insignis* and *amplexicaulis*, *Saxifraga flagellaris* and *purpurascens*, *Soldanella montana*, *Aristolochia pallida*, &c.

Of the forty spring-flowering plants whose dates of flowering are annually recorded to the Society, two came into flower during April, and one in May, thus completing the list given on previous page.

May.—During the month vegetation generally made good progress, although there was a considerable amount of frost during the first week, and cold east winds during the last week of the month. From the 7th till the 24th a spell of fine bright weather took place, during which time vegetation made rapid strides. Ordinary deciduous trees and shrubs developed fine luxuriant foliage, and by the end of the month many of them were in blossom. Amongst those which flowered best were the various species of *Pyrus* and *Prunus*, Horse Chestnut, Lilac, Hawthorn, Laburnum, and *Magnolia purpurea*. The quantity and condition of the flowers produced were rather above the average. Late flowering Rhododendrons and *Azalea pontica* were very well covered with flowers, while Ghent Azaleas were very sparse. Bushes of *Erica australis* and *Olearia Gunniana* were unusually fine; both are handsome May-flowering hardy plants, not too well known throughout the country.

The thermometer was at or below the freezing point on four nights, the total amount of frost being 12°, while in last May 4° only were recorded. The lowest readings were—on the 1st, 30°; 2nd, 25°; 4th, 32°; 5th, 29°; 21st, 33°. The highest morning readings were—on the 8th, 57°; 9th, 57°; 16th, 60°; 17th, 60°; 24th, 59°. The lowest day temperature was 52° which occurred on the 20th; and the highest, 74°, on the 24th of the month.

On the Rock Garden a large number of alpine and herbaceous plants were in flower; no less than 326 species and varieties came into flower during May, being 73 in excess of last May. Amongst the most interesting were:—

Andromeda fastigiata.
Anemone alpina sulphurea.
 „ *narcissiflora*.
Anthyllis erinacea.

Alyssum alpestre.
Androsace lanuginosa Leicht-
 linii.
 „ *sarmentosa*.

Androsace Chamæjasme.	Helicophyllum Albertii.
Aquilegia Stuartii.	Lamium Orvala.
Cytisus Ardoinii.	Linaria alpina.
Cerintho alpina.	Oxytropis uralensis.
Chrysogonum virginianum.	Phlox nivalis.
Cheiranthus Marshallii.	Primula pedemontana.
Clintonia Andrewsii.	„ geraniifolia.
Dianthus gelidus.	Pentstemon Menziesii.
Daphne collina.	Polemonium humile.
Enkianthus himalaicus.	Potentilla purpurea.
Erica australis rosea.	Rhodora canadensis.
Genista pilosa.	Saponaria ocyroides splendens.
Gaultheria trichophylla.	Silene acaulis.
Haberlea rhodopensis robusta.	„ pusilla, &c.

June.—Considerable injury was done to many plants from the protracted drought which prevailed. There were twenty-four dry days during the month. On one day only was there much rain, viz., on the 4th.

Late transplanted trees and shrubs suffered most severely. All surface-rooting perennials have been more or less injured. Herbaceous plants rushed suddenly into flower, and went past in an incredibly short time. Many of them became scorched up in a manner which I have never previously observed. Annuals of various kinds do not appear to have suffered at all, and the same may be said of Pelargoniums, Calceolarias, and other bedding plants. Hardy deciduous trees and shrubs have been prolific of bloom. A few have been finer than usual, such as the flowering Ash (*Fraxinus Ornus*), Elder, *Escallonia Phillipiana*, *Olearia ilicifolia*, and several species of New Zealand Veronicas. Roses are very dwarf, and though clean and well budded, have rather a starved-like appearance.

During the month the thermometer did not fall so low as the freezing point at the garden, although in some parts of Scotland it fell several degrees below it. The lowest night readings were—1st, 34°; 2nd, 38°; 3rd, 42°; 21st, 36°. The lowest day temperature was 52°, on the 2nd, and the highest 86°, on the 22nd.

On the Rock Garden 432 species and varieties of plants came into flower during the month, making a total of 1048 for the season, as against 753 at the corresponding date last year. Amongst them were the following :—

Androsace foliosa.	Leontopodium alpinum.
Aciphylla squarrosa.	Linaria antillarica.
Arum palestinum.	Lithospermum graminifolium.
Calceolaria Kellyana.	Nardostachys Jatamansi.
„ plantaginea.	Orchis maculata superba.
Calochortus cœruleus.	Oxytropis cyanea.
Campanula Zoysii.	Pæonia tenuifolia fl.-pleno.
Cistus formosus.	Polygonum sphærostachyum.
Dianthus alpinus.	Pentstemon speciosus.
„ glacialis.	Ramondia pyrenaica.
„ neglectus.	Rhododendron ferrugineum
„ superbus.	album.
Edraianthus serpyllifolius.	Senecio laxiflorus.
Erythræa aggregata.	„ pulcher.
Gaultheria carnea.	Saponaria ocymoides Loderi.
Globularia nana.	Tropæolum polyphyllum.
Heuchera sanguinea.	Vancouveria hexandra.
Helicophyllum Lehmanni.	Vaccinium Mortinia.
Hypericum empetrifolium.	Veronica amplexicaulis.
Hypoxis erecta.	„ anomala.
Iberis jucunda.	Wyethia mollis, &c.