WILD FLOWERS

of

WATERTON LAKES

National Park

Canadian Section
WATERTON-GLACIER
INTERNATIONAL PEACE PARK

THE WILDFLOWERS OF

WATERTON LAKES NATIONAL PARK

- A Guide to 64 Flowering Plants of the Valleys, Meadows and Alpine Slopes -

Early in the spring just after the snow leaves the ground, the glacier lilies spread a beautiful yellow carpet over wide areas along the Chief Mountain Highway, particularly around Crooked Creek and the Waterton Valley Viewpoint. Other early blooming flowers along the highways are purple pasque flowers with flowers sometimes two inches across, and carpet pink with tiny rose-pink flowers forming low matted cushions on the ground, and the blue camas lily. Excepting the last flower which grows only near the entrances to the park, all may be seen at middle elevations during early July. At about the time the meadows at higher elevations start to bloom, those below have finished or changed their pattern. During the latter part of June and early July there are pink geraniums, blue and yellow pentstemons, purple-flowered silky phacelias, pale blue burr forget-me-nots, yellow arnicas and a host of others.

Gradually as the summer presses on, many of these are replaced with other species such as the gaillardia, exactly alike in appearance to the cultivated variety, yellow and bronze false dandelions, showy purple fleabane, brilliant red paintbrush, shrubby cinquefoil with bright yellow flowers, white spiraea, wild roses, purple horsemint, and the pink-flowered wild hollyhockwhich is one of the most admired plants along the trails and roads of the lower portion of the park.

During the latter part of the season, purple asters with their numerous showy flower heads are among the most conspicuous roadside flowers, especially in the Blakiston Creek valley. Goldenrod also makes its appearance, as well as the tall slender stalks of mullein, with yellow flowers clustered on the erect candle-like stalks. This pretty flower is regarded as a weed. It occurs mainly in areas disturbed by man's activities.

Following the early flowers in the lower portions of the park, the meadows blossom out with myriads of colours and the cirque valleys begin to present a fine display offlowers. Many of the species are the same as those seen in the lower meadows earlier in the season, but others may be seen only at the higher elevations. Late in the season, the yellow-flowered St. John's Wort with its bright red buds, becomes one of the most conspicuous plants.

The following illustrations by Virginia L. Bailey, and made available to this park through the courtesy of the Glacier Park Inc., include some of the more common and showy of the flowers seen along trails and highways in the park. A simplified guide has been included to aid in the identification of the species.

WILDFLOWER IDENTIFICATION GUIDE

1. YELLOW FLOWERS:

Plants shrubby; petals 5; blooming over a long period, at low and middle elevations SHRUBBY CINQUEFOIL	#1
Plants herbaceous:	
Flowers resembling snapdragons, pale yellow and orange, borne along the top side of the erect stem	#2
Flowers not as above:	
Flower stalks erect, candle-like, 3 to 5 feet tall, sometimes branched; flowers borne close to the stem; common during the latter part of the season	#3
Flower stalks not candle-like:	
Flowers or flower heads at least 1/2 inch across, borne singly or in loose clusters of a few.	
Flowers not in heads like a daisy.	
Flowers 1 to 2 inches across, nodding; leaves mostly 2, basal; blooming soon after the snow leaves	#4
Flowers 1/2 to 3/4 inch across:	
Leaves opposite, not divided; buds red; blooms late in the season ST. JOHN'S WORT	#5
Leaves alternate and basal, deeply divided; buds not red; blooms early and mid-season ALPINE CINQUEFOIL	#6
Leaves opposite; flowers yellow throughout; common during mid-summer	#7
Leaves alternate or basal:	
Leaves along the stem; flowers $2\frac{1}{2}$ to $3\frac{1}{2}$ inches across, the centre brown; petal-like ray flowers yellow; common	#8
Leaves mostly basal; flower heads composed entirely of petal-like rays, yellow and bronze; common	#9
Flower or flower heads smaller, usually in dense clusters:	
Flower clusters more or less flat-topped, lemon yellow	#10

Flowers bright yellow, the clusters of heads broadly elliptic with pointed tip; plants 2 to 3 feet tall	LDENROD #11
Flowers pale yellow to whitish or rusty, the clusters oblong; plants 1/2 to 1 foot high:	
Flowers pea-like, nodding, the clusters loose and open YELLOW HE	DYSARUM #12
Flowers tubular, erect or spreading, the clusters compact:	
Flowers borne in circles along the stems, yellow to whitish; early in the season YELLOW PEN	TSTEMON #13
Flowers clustered similar to Indian Paintbrush, rusty-yellow	CLOVER #14
2. WHITE FLOWERS:	×
Plants shrubby:	
Flowers large, borne singly or in loose clusters:	
Leaves large and maple-like; berries bright red, raspberry-like; common in forest openings	BLEBERRY #15
Leaves small; flowers in loose showy clusters; berries dark purple; common	CEBERRY #16
Flowers small, borne in many-flowered clusters:	
Flower clusters more or less flat-topped; leaves opposite; common along streams	DOGWOOD #17
Leaves alternate:	
Plants low and often herb-like; leaves not divided; common in dry open places	SPIRAEA #18
Plants taller and branched; leaves divided into separate leaflets; berries bright red MOUNT	MAIN ASH #19
Flower clusters not flat-topped:	
Flower clusters broadly oblong to roundish:	
Leaves divided into separate leaflets; berries tiny, black	DERBERRY #20
Flower clusters narrowly oblong; fruits small black cherries in drooping clusters; blooming early in the season	CECHERRY #21

Plants herbaceous:	
Flowers borne in more or less flat-topped clusters:	
Plants tall and coarse, 2 to 6 feet tall; leaves divided into separate leaflets:	
Leaflets large and broad, lobed	#22
Leaflets narrowly oblong, finely toothed WHITE ANGELICA	#23
Plants lower, 8 to 24 inches tall; leaves deeply divided:	
Leaves with few coarse segments; common in meadows	#24
Leaves finely divided and fern-like; common along dry roadsides	#25
Leaves not divided:	
Leaves mostly basal; flowers white to pinkish $\underline{\mathtt{UMERELLA\ PLANT}}$	#26
Leaves along the stem; flower heads papery, the centre yellow	#27
Flowers not borne in flat-topped clusters:	
Flowers large, borne singly or apparently so; plants low:	
Flowers of alpine meadows blooming soon after snow leaves; leaves roundish, coarsely lobed $\underline{\text{GLOBEFLOWER}}$	#28
Flowers of lower forests; leaves oval to oblong:	
Flowers open funnel-like; leaves 2, basal; berries single, blue	#29
Flowers in tight bunches surrounded by 4 petal-like bracts; leaves in circle of 4 at middle of stem; berries bunched, red	#30
Flowers smaller, not borne singly:	
Plants large, 2 to 4 feet high, the leaves grass-like and wiry in a thick basal cluster; flowers borne in large pear-shaped heads	#31
Plants smaller:	
Flowers dingy white, borne on a slender stem:	
Flowers narrowly bell-shaped, erect, inconspicuous; leaves basal; leaf-blades roundishALUM-ROOT	#32

Flowers with curved beak-like tip, spreading; leaves divided into narrow segments ALPINE LOUSEWORT	#33
Flowers white, tiny, in loose spreading clusters; leaves oblong, in circles of 4 along the stems	#34
3. BLUE TO PURPLE FLOWERS	
Flowers in daisy-like heads with yellowish centres:	
Plants mostly with erect stems, not branched or with only few branches; petal-like rays numerous, narrowly strap-like SHOWY FLEABANE	#35
Plants mostly much branched; petal-like rays usually fewer and smaller; blooming later in the season than above	#36
Flowers not daisy-like, or if in heads, petal-like rays none:	
Flowers borne singly or few in a loose cluster:	
Plants of alpine meadows:	
Flowers narrowly bell-shaped, rather fluted; leaves opposite, not divided; late blooming MOUNTAIN GENTIAN	#37
Plants not confined to alpine meadows:	
Flowers with spreading petals; leaves divided into narrow lobes; early blooming	#38
Plants vine-like and trailing over banks, flowers pea-like; conspicuous along highwaysVETCH	#39
Plants erect:	
Coarse plants with spiny stems and leaves; flowers in heads	#40
Slender plants:	
Stems not branched; flowers showy, bell-shaped, nodding; late-blooming along road-sides and trails	#41
Plants branching and open; flowers small, light blue with yellow centres; fruits small burs, common, early-blooming,	#12

Flowers borne in heads or clusters:	
Flower stems leafless; leaves 2, basal:	
Flowers with spreading petals, dark purple- blue, in oblong clusters; early-blooming <u>BLUE CAMAS</u>	#43
Flowers bell-shaped, reddish-purple, in dense heads	#44
Flower stem leafy:	
Flowers pea-like, light purplish-blue; leaf-blades roundish, divided, silky LUPINE	#45
Flowers not pea-like:	
Flowers tubular; leaves opposite, not divided:	
Flowers borne in circles along the round stems; leaves not hairy;	#46
Flowers borne in oblong heads; stems square; leaves hairy	#47
Flowers not tubular:	
Flowers open bell-shaped, with spreading lobes all alike, borne in compact clusters; leaves deeply lobed, common	#48
Flowers with separate petals not all alike; leaves deeply divided to the centre LARKSFUR	#49
4. PINK TO RED, PURPLE-RED, ORANGE, OR BROWN FLOWERS (OR SHOWY FRUITS)	
Low alpine plants, usually less than 6 inches high:	
Plants with erect woody stems, short linear leaves, and nodding bell-shaped flowers RED MOUNTAIN HEATH	#50
Plants erect, grass-like; flowers clustered head-like, dark brown	#51
Taller plants not confined to alpine zones:	
Plants shrubby, or if not, then 2 to 5 feet high:	
Flowers or fruits large and showy, mostly 1 inch or more across:	
Tall shrubs or small trees up to 15 feet high; fruits winged, the wings red or green, borne in spreading pairs	#52

Plants lower, up to 5 feet high; flowers rose- pink:	
Plants erect; leaves large, roundish, deeply lobed as in maple leaves, flowers borne along upper end of stem	#53
Plants spreading and often low; usually thorny; leaves divided into separate leaflets	#54
Flowers smaller:	
Flowers pale pink, bell-shaped, several on slender nodding stems in upper leaf-axils RUSTY MENZIESIA	#55
Flowers rose-colour, borne in dense flat- topped clusters; occurs in upper forests and meadows	#56
Plants herbaceous, mostly not exceeding 2 feet in height:	
Flowers borne singly:	
Flowers large erect, orange-red, leaves in circles along the stem	#57
Flowers smaller, spreading, tubular, common in the upper meadows <u>RED MONKEYFLOWER</u>	#58
Flowers light purplish-pink; petals 5, spreading, common	#59
Flowers not borne singly:	
Plants sometimes up to four feet high; flowers magenta, in showy oblong clusters at the ends of the stems; common in disturbed places FIREWEED	#60
Plants smaller:	
Flowers borne along the sides of slender stems, the ends beaked and turning upwards like an elephant's trunk	#61
Flowers not as above:	
Flowering stems not leafy; herbage with onion-like odor; flowers pink to whitish, nodding from the top of the stem	#62
Flowering stems leafy; without odor:	
Flower clusters red to orange, narrowly to broadly oblong, composed mostly of broad coloured bracts INDIAN PAINT BRUSH	#63
Flowers rose-coloured, borne in broad more or less flat-topped heads; stems square	#64

SHRUBBY CINQUEFOIL: yellow; 1 to 3 feet high; low to high altitudes; July and August.

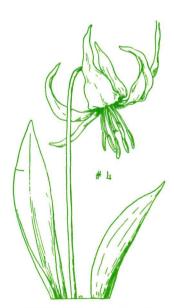


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BUTTER AND EGGS: yellow and white; 10 to 20 in. high; some low altitudes; June and July.



MULLEIN: yellow; 3 to 5 feet high; August and September.



GLACIER LILY: bright yellow; 6 to 12 in. high; low to high altitudes; June and July; fruiting stem up to 18 in.



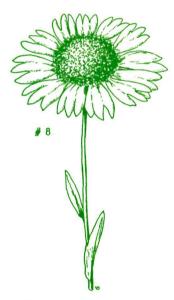
ST. JOHN'S WORT: yellow, the buds red; 4 to 12 in. high; subalpine meadows near timberline; August and September.



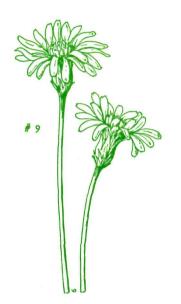
ARNICA: (13 species occur in the park); yellow; 6 to 20 in. high; low altitudes to timberline; June to August.



ALPINE CINQUEFOIL: yellow; 4 to 8 in. high; high altitudes; July and August.



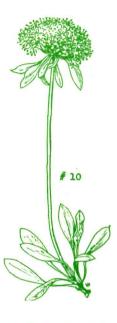
GAILLARDIA: yellow with purplishbrown centre; 1 to 2 feet high; low to middle altitudes; June to August.



FALSE DANDELION: yellow or orange; 6 to 18 in. high; low to high altitudes; July and August.



GOLDENROD: yellow; 2 to 3 feet high; low to high altitudes; August and September.



SULPHUR PLANT: bright lemonyellow; 4 to 14 in. high; above timberline, forming mets on shale slopes; July and August.



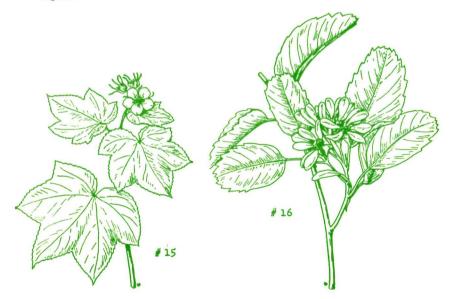
YELLOW HEDYSARUM: pale-yellow and cream-coloured; 10 to 30 in. high; Low altitudes to timberline; July.



YELLOW PENTSTEMON: yellow to cream-coloured; 8 to 16 in. high; low to middle altitudes; June to August.

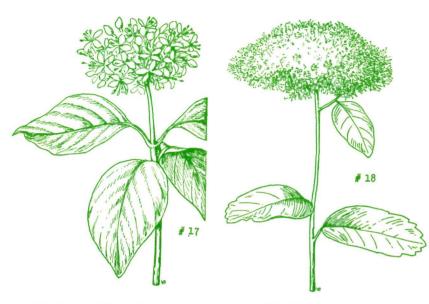


OWL'S CLOVER: rusty yellow; 4 to 12 in. high; dry prairie; June to August.



THIMBLEBERRY: white; 2 to 4 feet; forests at low and middle altitudes; flowers in June and July; bright red fruit in August.

SERVICEBERRY: white; 2 to 6 feet; low to middle altitudes; June; fruits dark purple, in drooping clusters; August and September.



RED OSIER DOGWOOD: white; 3 to 6 feet high; low and middle altitudes; July. Berries white or bluish; August.

WHITE SPIRAEA: white; 1 to 2 feet high; low and middle altitudes; July and August.



MOUNTAIN ASH: white; 3 to 6 feet high; flowers in July; bright red fruits in August or September.

ELDERBERRY: white; 4 to 6 feet high; flowers June and July; black berries in August and September.



BLACK CHOKECHERRY: white; 1 to 12 feet high; low altitudes mostly; fruits small black cherries; July and August.

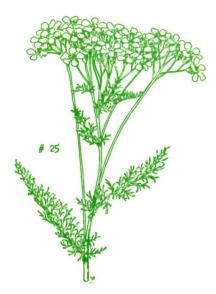
COW PARSNIP: white; 3 to 6 feet high; low and middle altitudes; July and August.



WHITE ANGELICA: white; 2 to 4 feet high; July and early August.



VALERIAN: white; 1 to 2 feet high; middle and upper altitudes; July and August.



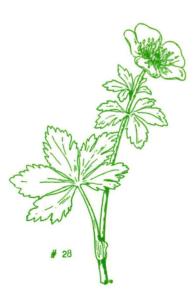
YARROW: white; 6 to 20 in. high; low altitudes to timberline; July and August.



PEARLY EVERLASTING: white with small yellow centre; 8 to 15 in. high; low to high altitudes; July and August.



UMERELLA PLANT: white to creamcoloured or pinkish; 8 to 15 in. high; dry exposed places at low altitudes; July and August.



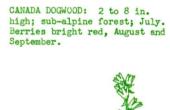
GLOBEFLOWER: white to creamcoloured; 6 to 12 in. high; wet sub-alpine meadows; July.



QUEENSCUP: white; 3 to 8 in. high; in forests at middle altitudes; July.



BEARGRASS: white; 2 to 4 feet high; low to high altitudes; June to August.





ALUM-ROOT: yellowish-white; 8 to 15 in. high; lower altitudes to timberline; July.



ALPINE LOUSEWORT: yellowishwhite; 6 to 14 in. high; at timberline; July and August.



SHOWY FLEABANE: -purple to lavender, the centre yellow; 6 to 20 in. high; low to high altitudes; July and August.



NORTHERN BEDSTRAW: white; 6 to 18 in. high; low to middle altitudes; July and August.



PURPLE ASTER: purple-blue, with yellow centre, 1 to 2 feet high; low to middle altitudes; August to September.



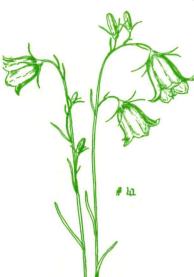
MOUNTAIN GENTIAN: dark purpleblue; near timberline; 4 to 12 in. high; August.



VETCH: purple; vine trailing over ground; along roadsides; 2 to 12 in. high; low to middle altitudes; August.



BULL THISTLE: purple; 2 to 4 feet high; low and middle altitudes; August and September.



HAREBELL: blue; 6 to 15 in. high; low to high altitudes, including alpine slopes; June to September.



BLUE CAMAS: dark purple-blue; 1 to 2 feet high; near park entrances only; June and early July.



BUR FORGET-ME-NOT: light blue; 2 to 3 feet high; lower altitudes to timberline; July.



PURPLE ONION: reddish-purple; 8 to 15 in. high; occasional in meadows at low and middle altitudes; July and August.



LUPINE: blue; 1 to 2 feet high; low and middle altitudes; June and July.



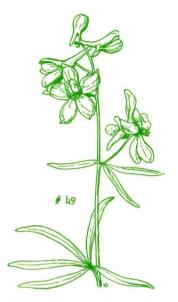
SELF-HEAL: purple; 4 to 12 in. high; low to middle altitudes; July and August.



BLUE PENTSTEMON: purple-blue; 6 to 15 in. high; low to alpine altitudes; July mainly.



SILKY PHACELIA: dark purplishblue; 8 to 14 in. high; low and middle altitudes; July.



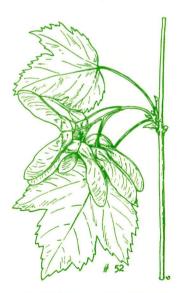
LARKSFUR: purple-blue; 6 to 18 in. high; low and middle altitudes; late June to early August.



MEADOW RUSH: dark-brown; 4 to 14 in. high; low altitudes to alpine meadows; July and August.



RED MOUNTAIN HEATH: rose-red; 4 to 12 in. high; at and near timberline; July and August.



DOUGLAS MAPLE: 6 to 12 feet high; low and middle altitudes; fruits green and red, winged; July and August.



WILD HOLLYHOCK: apricot-pink; 2 to 5 feet high; at low and middle altitudes; July and early August.



WILD ROSE: pink; 1 to 3 feet high; low to middle altitudes mostly; June and July; fruits bright red, August and September.



RUSTY MENZIESIA: white to pinkish; 3 to 6 feet high; in forest at middle altitudes; July.



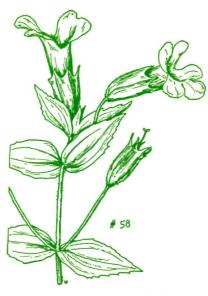
PINK SPIRAEA: rose-pink; 2 to 3 feet high; middle to high altitudes; late July and August.



WOOD LILY: orange-red with brownish-purple spots; 1 to 2 feet high; forests and meadows at low and middle altitudes; July.



PINK GERANIUM: purplish-pink; 2 to 3 feet high; low to middle altitudes; June and July.



RED MONKEY FLOWER: red; 1 to 2 feet high; low to high altitudes; July and August.



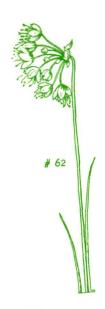
FIREWEED: red-purple; 2 to 5 feet high; low to middle altitudes; August and September.



ELEPHANT HEAD: purplish-pink; 8 to 16 in. high; mostly at middle altitudes; July and August.



INDIAN PAINTERUSH: bright red or red-orange; light yellow at higher elevations; 6 to 15 in. high; low to high altitudes; July and August.



NODDING ONION: pale-pink; 6 to 18 in. high; open low to middle altitudes; July and August.



HORSEMINT: purplish-red; 1 to 2 feet high; low and middle altitudes; late July and August.

THE BIO-CLIMATICAL LIFE ZONES OF W.L.N.P.

