

## SHOWY GOLDENEYE

*Heliomeris multiflora* Nutt.

Plant Symbol = HEMU3

Contributed by: USDA NRCS Idaho Plant Materials Program



Showy goldeneye. Al Schneider @ USDA-NRCS PLANTS Database.

### Alternate Names

*Common Alternate Names:* False goldeneye, sunspots

*Scientific Alternate Names:* *Viguiera multiflora*

### Uses

#### Landscaping

Showy goldeneye produces abundant flowers and is easy to manage in landscaped settings. It has been used in mixed borders and meadow gardens.

#### Wildlife

Showy goldeneye attracts a variety of native bees, butterflies and hummingbirds (Lady Bird Johnson Wildflower Center 2012). Cockerell (1919) reported several native bee species visiting showy goldeneye in Peaceful Valley, Colorado including *Halictus cressonii*, *Panurginus porterae*, and *Halictoides oryx*.

Showy goldeneye also provides food for larger animals. Cattle, sheep, deer and elk eat leaves and flower heads (Kufeld 1973). Birds and small rodents eat the seed.

#### Range

Showy goldeneye can be used for restoration of native plant communities. It is competitive against other species and does well when planted in a mixture (Stevens et al

1981). It will spread by seed into open areas and areas occupied by annuals (Stevens and Monsen 2004).

### Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g., threatened or endangered species, state noxious status, and wetland indicator values).

### Description

*General:* Composite family (Asteraceae). Showy goldeneye is a perennial forb arising from a woody taproot. The much branching stems reach approximately 1 m (39 in) in height. Leaves are lanceolate to linear, opposite, entire or serrate, 1 to 8 cm (0.4 to 3.2 in) long and 2 to 20 mm (0.08 to 0.8 in) wide. There are commonly 2 to several flower heads per stem. The disk is 6 to 14 mm (0.25 to 0.6 in) across with dark yellow flowers. The disk is surrounded by 10 to 14 yellow ray flowers, 7 to 18 mm (0.3 to 0.7 in) long. The fruit is a brown achene 1.2 to 1.8 mm (0.05 to 0.07 in) long lacking a pappus (Welsh et al 2003). There are approximately 1,000,000 seeds per pound in pure seed.

### Ethnobotany

Showy goldeneye had limited use by Native Americans. The seed was used for food by the Goshute Tribe (Chamberlin 1911). Navajo grazed sheep on showy goldeneye (Vestal 1952).

### Distribution:

Showy goldeneye is found in most western states from Texas north to Montana and west to California, Nevada and Idaho. For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site.

### Habitat:

Showy goldeneye occurs in sagebrush, juniper, cottonwood, aspen, and spruce fir communities from 1,350 to 3,000 m (4,430 to 9,840 ft).

### Adaptation

This species prefers areas with full sun in well drained loam to loamy sand soils. It is found in sites receiving approximately 457 to 635 mm (18 to 25 in) of annual precipitation. It is recommended for use in USDA Plant Hardiness Zones 4b to 10a (EverWildeFarms 2012).

### Establishment

Showy goldeneye can be drilled or broadcast into rangeland seedings (Walker and Shaw 2005). For optimum establishment, seed should be dormant seeded in late fall to a depth of 0.3 to 0.6 cm (1/8 to 1/4 in) in a

firm, weed-free seed bed. The recommended full stand seeding rate for showy goldeneye is 2 lbs/acre; for a seed mixture adjust the seed rate accordingly (Ogle et al 2011). This species has good seedling vigor (Stevens and Monsen 2004) which makes it a useful component in seed mixtures.

### Management

Showy goldeneye should be used as a minor component of seed mixtures. Management strategies should be based on the key species in the established plant community. Grazing should be deferred on seeded lands for at least two growing seasons to allow for full stand establishment (Ogle et al. 2011; Stevens and Monsen 2004).

### Pests and Potential Problems

Showy goldeneye can accumulate nitrate when growing in areas with high levels of nitrogen from fertilizers or animal excrement (Williams 1989). Animals suffering from nitrate intoxication will show labored respiration, trembling, weakness and collapse. Death occurs in less than an hour (Burrows and Tyril 2001).

### Environmental Concerns

Showy goldeneye is native to western North America. It can spread under favorable conditions but does not pose any environmental concern to native plant communities.

### Seeds and Plant Production

Seed is collected by hand, beating or stripping in wildland situations (Stevens and Monsen 2004). Seed remains viable for up to 7 years in warehouse conditions without a significant loss of viability (Stevens and Jorgensen 1994). Showy goldeneye produces large quantities of flowers and will set seed in the first year of growth. Seed of showy goldeneye is dormant and has a pre-chilling requirement for germination.

### Cultivars, Improved, and Selected Materials (and area of origin)

Seed of showy goldeneye is available in limited quantities on the commercial market. Larger quantities of seed can be grown on a contract basis (Walker and Shaw 2005).

### References

- Burrows, G.E. and R.J. Tyril. 2001. Toxic Plants of North America. Iowa State University Press. Ames, Iowa. 1342p.
- Chamberlin, Ralph V. 1911. The Ethno-Botany of the Gosiute Indians of Utah. *Memoirs of the American Anthropological Association* 2(5):331-405.
- Cockerell, T.D.A. 1919. The bees of Peaceful Valley, Colorado. *Journal of the New York Entomological Society*. 27(4): 298-300.
- EverWildeFarms. 2012. Accessed online October 31, 2012. Available at: <http://www.everwilde.com/wildflower-store.html>
- Kufeld, R.C. 1973. Foods eaten by the Rocky Mountain elk. *Journal of Range Management*. 26: 106-113.

Lady Bird Johnson Wildflower Center. 2012. The University of Texas at Austin. Accessed October 18, 2012. Available at [http://www.wildflower.org/plants/result.php?id\\_plant=SYAS3](http://www.wildflower.org/plants/result.php?id_plant=SYAS3).

- Ogle, D., St. John, L., Stannard, M., and L. Holzworth. 2011. Technical Note 24: Conservation plant species for the Intermountain West. USDA-NRCS, Boise, ID-Salt Lake City, UT-Spokane, WA. ID-TN 24. 57p.
- Stevens, R., and K.R. Jorgensen. 1994. Rangeland species germination through 25 and up to 40 years of warehouse storage. In: Monsen, S.B., and S.G. Kitchen. Comps. 1994. Proceedings-ecology and management of annual rangelands; 1992 May 18-21; Boise, ID. Gen. Tech. Rep. INT-GTR-313. Ogden, UT: USDA Forest Service, Intermountain Research Station: 257-265.
- Stevens, R., Moden, W.L., Jr., and D.W. McKenzie. 1981. Interseeding and transplanting shrubs and forbs into grass communities. *Rangelands*. 3: 55-58.
- Stevens R., and S.B. Monsen. 2004. Forbs for seeding range and wildlife habitats. In: S.B. Monsen, R. Stevens, and N.L. Shaw [compilers]. Restoring western ranges and wildlands. Fort Collins, CO: USDA Forest Service, Rocky Mountain Research Station. General Technical Report RMRS-GTR-136-vol-2. p. 425-491.
- Vestal, Paul A. 1952. The Ethnobotany of the Ramah Navaho. *Papers of the Peabody Museum of American Archaeology and Ethnology* 40(4):1-94.
- Walker, S.C., and N.L. Shaw. 2005. Current and potential use of broadleaf herbs for reestablishing native communities. USDA Forest Service Proceedings. RMRS-P-38. Rocky Mountain Research Station. Boise, Idaho. pp. 56-61.
- Welsh, S.L., Atwood, N.D., Goodrich, S. and L.C. Higgins. 2003. A Utah Flora. Brigham Young University. Provo, UT. 912p.
- Williams, M.C. 1989. Accumulation of nitrate by annual goldeneye and showy goldeneye. *Journal of Range Management*. 42: 196-198.

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### Citation

Tilley, D. 2012. Plant Guide for showy goldeneye (*Heliomeris multiflora*). USDA-Natural Resources Conservation Service, Aberdeen, ID Plant Materials Center. 83210-0296.

Published November 2012

Edited: 31Oct2012djt; 1Nov2012ls;  
10Dec2012ee; 10Jan2013jab

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