WRITTEN FINDINGS OF THE WASHINGTON STATE NOXIOUS WEED CONTROL BOARD

(Updated December 1998)

<u>Scientific Name:</u> *Centaurea jacea* L.

Common Name: Brown knapweed, rayed knapweed

<u>Family:</u> Asteraceae (Compositae)

Legal Status: Class B: (a) regions 1, 2, 3, 4, 5, 7, 9, 10

(b) region 6 except Kittitas County.

(c) region 8 except Clark County.

<u>Description and Variation:</u> Brown knapweed is a perennial plant with a woody root crown that grows 20 to 48 inches tall, branching near the top. The branches have egg-shaped or lance-shaped, undivided leaves that become progressively smaller up the stem. The stem is ridged, sometimes purple-striped. The 3/4-to-1 inch, light to dark brown heads are found at the ends of the branches. The somewhat hairy bracts are wider at the tips, with broad, thin, papery margins. The center of the bracts are dark brown. The bract tips overlap the base of nearby bracts. The flowers, which bloom July to October, are rose to purple, rarely white.

<u>Economic Importance</u>: As with other knapweed species, brown knapweed has shown itself to be aggressive and invasive, this one is particularly so in meadows and pastures, crowding out more desirable forage.

<u>Geographical Distribution:</u> Brown knapweed is native to southern Scandinavia, Atlantic and Central Europe, northern Italy and the Balkans.

<u>Habitat:</u> Brown knapweed grows in grasslands and open woods over most of Europe or Eurasia and occurs at elevations up to 6600 feet in mountainous areas of central Europe to 63° 43' north latitude. In Russia, it grows in meadows, woodland clearings, and in cutover areas of forest. The species can tolerate partial shade. In Romania, brown knapweed grows in pastures, orchards and plains; it prefers the mountainous region.

<u>History:</u> Centaurea jacea has been grown both as an ornamental garden plant and as a crop. It was also introduced at seaports. It was present in meadows at Cedar Hills, Victoria, Vancouver Island, in 1887. In Washington, brown knapweed occurs mainly west of the Cascades.

Growth and Development: Perennial

Reproduction: Seeds and woody root crown

<u>Hybrids</u>: *Centaurea jacea* is a parent to meadow knapweed (*Centaurea jacea* x *nigra*).

<u>Response to Herbicides:</u> Glyphosate, picloram, 2,4-D, and clopyralid have all been used on knapweeds. Please refer to most recent PNW Weed Control Handbook for more information. Read and follow current herbicide labels and recommendations for control.

Response to Cultural Methods:

<u>Biocontrol Potentials:</u> *Urophora quadrifasciata*, a seed head gall fly, has been used at a few, limited brown knapweed sites in Washington.

References:

- *Frankton and Mulligan. 1970. Weeds of Canada. Canada Dept. of Agriculture.
- *Moore and Frankton. 1974. The Thistles of Canada. Monograph 10. Canada Dept. of Agriculture.
- *Muenscher, W.C. 1955. Weeds, 2nd ed. Cornell University Press, Ithaca, NY.
- *Roche', B.F. Jr., G.L. Piper, and C.J. Talbott. 1986. Knapweeds of Washington. EB 1393. Extension Bulletin. W.S.U. Cooperative Extension, Pullman.
- *Roche', B.F. Jr., G.L. Piper and C.J. Talbott. 1986. The Collection History of *Centaureas* Found in Washington State. Research Bulletin XB 0978. Agricultural Research Center. Washington State University, Pullman.
- *References available from the Washington State Noxious Weed Control board Office in Kent.