# Common & Annual Bugloss: Options for control

Common bugloss (Anchusa officinalis), a class-B designate noxious weed in Lincoln County, Washington. Common and Annual bugloss are member of the Borage family, and was introduced from Europe. Common bugloss

is also known by the names Anchusa bugloss, Common anchusa and Alkanet. Because of its pretty blue flowers and medicinal and dye use, it has found a spot in many home and flower gardens. Unfortunately, each plant produces over 900 seeds and the seeds can remain viable for several years in the soil.

Common bugloss is a perennial herb with a deep taproot. The plant ranges from one to two feet tall, with several flowering stems. The stems and leaves are fleshy, and the overall plant is coarsely hairy. The basal leaves are petiolate

COMMON BUGLOSS



Common bugloss in rosette.



Common bugloss leaves have a rough, hairy surface and are linear in shape.



Flower stem initially coiled like a fiddleneck, but uncoils as flower opens.



Each flower can produce four seeds (nutlets).

(have a leaf stalk), and are narrowly oblong. The leaves along the plant stem are narrow and slightly pointed, with a short petiole. The leaves are progressively smaller up the stem, and the upper leaves are

sessile (no petiole), or clasping. The blue to purple flowers have white throats. The petals are five equal lobes, forming an un-curved tube. The flowers are found in cymes, or helicoid clusters, at the end of the stems. As the flowers open,

> these coils unfold and straighten out. The fruit is a four chambered nutlet; each nutlet contains one seed.

> Annual bugloss (Anchusa arvensis), also a class-B designate noxious weed in Lincoln County, WA. is a diminutive weedy annual. It is a leafy herb with erect stems and alternate leaves. The petiolate lance-shaped leaves are bristly hairy and crinkled on the margins. Blue funnel-formed flowers are borne in helicoid clusters at the tip of

the plant. Annual bugloss is similar in many re-

spects to common bugloss and **ANNUAL BUGLOSS** resembles a blue-flowered tarweed. The fruit is a nutlet with four nutlets per flower. The scientific name means weedy in the field and it can be a serious pest in cropland, particularly in small grain crops.

### Key identifying traits

- Common's flowers are purplish blue, sometimes pink, with a white center; **un-curved tube**; 5 equal lobes in a coiled flower stem of more than five. Annual's flowers are sky blue, have a curved tube and five unequal lobes in short coiled flower stems.
- Common's leaves are fleshy, linear, not wavy and most hairs do not have a warty base. Annual's leaves are wavy, warty and bristly.

### **Biology and ecology**

- Common bugloss is a perennial, growing 1 to 2 feet tall, with a deep tap root. Annual bugloss is an annual, just like it's name and grows 6-24 inches tall, with branching stems.
- Both plants reproduce only by seed, producing on • the average 900 seeds per plant. 90% of the seeds remain viable after three years.
- Common bugloss' first year growth is a rosette; second year a single flower stalk, subsequently many stalks. Annual germinates primarily in spring, but some wait until fall.
- Both grow in dry areas, roadsides, pastures, cultivated fields, including dry land alfalfa fields. Common's succulent leaves cause mold in baled hay.
- The **roots** produce a purplish red dye.



Leaves are stiff, wavy lance shaped with bristly hairs that arise from warty bumps.



Annual bugloss' flower tubes have a distinctive curve.



Flowers are born in spirals at the tip of the plant.



Annual appears more gnarly than it's cousin, common bugloss.



## **CONTROL MEASURES:**

For this and other publications, see our website at: www.co.lincoln.wa.us/weedboard

#### Prevention:

- **Early detection** is vital to prevent invasion.
- Prevent spread from infested fields by cleaning swather and combines.

#### Biological:

• None available.

#### <u>Cultural</u>:

• Good competitive vegetation helps prevent infestation, but doesn't stop it entirely.

#### Mechanical:

• Cultivation, digging and pulling can all be effective if a majority of the taproot is removed.

#### Chemical:

- Before flowering: 2,4-D; 2,4-D + dicamba (Weedmaster).
- An added **surfactant** is **a must** in order to penetrate leaf hairs.
- **Read** the **label** instructions before applying.

### Common Bugloss:





### Annual Bugloss:









Photos and references courtesy of: WSNWCB written findings; WSU Spokane County Extension's Master Gardener Program; Spokane County Noxious Weed Control; Stevens County Noxious Weed Control; Rich Old, XID Services, Thurston County Noxious Weed Control. Lincoln County Noxious Weed Control Board 405 Ross St. Davenport, WA 99122 509-725-3646