

## Friend and Foe:

# Thistle Guide for The Sea Ranch

*Adapted and expanded by Linda Lipkin from "A Thorny Subject" by Barbara Rice*

Thistles have always gotten a bad rap. But some thistles belong here, and are helpful to our environment. Even the moderately invasive Bull Thistle is often defended as being a valuable food source for goldfinches and Monarch butterflies. **Native thistles** (described below) support the wildlife that evolved with them. Protecting native thistles will help support our declining population of native bees. Cluster Thistle and Brownie Thistle provide nesting material for native bees. Many butterfly species are also attracted to our native thistles-- Brownie Thistle supports Mission Blue butterfly; Cobweb Thistle attracts Grass Skipper and Swallowtail butterflies as well as hummingbirds. Native thistles also host butterfly larva: many Crescent butterflies, Checkerspots, and the American Painted Lady.

## Thistles to Appreciate

The Sea Ranch is home to thistles native to the area: Brownie Thistle, Douglas Thistle, Cluster Thistle and Cobweb Thistle. All of them are uncommon, and harder to find than the non-natives. Most often seen are the Cluster Thistle and Brownie Thistle. Coyote Thistle, is another thorny thistle-like friend found here.

**Douglas Thistle** (*Cirsium douglasii*), may be found in sunny wet meadows or riparian areas from June through August. A many-branched stem has flower clusters with 10 or more flower heads, rosy purple. Usually less than five feet tall.

- *Douglas Thistle and Cobweb Thistle have more grayish leaves, so are easy to tell apart from invasive thistles.*



**Cluster Thistle** (*Cirsium brevistylum*) grows in moist places. The white to purple flowers are an inch across (or a little under), blooming from June through August. The dark green leaves may be difficult to distinguish from Bull Thistle before bloom, but the weedy Bull Thistle has a more gumdrop shaped flower head. Flower heads are covered in fibers resembling cobwebs.

- Annual, biennial or short-lived perennial
- **Stems are fuzzy and mostly unbranched (branched/clustered and more fuzzy near the top)**
- Flower heads are “cobwebby”
- Flower heads are red- purple and have small white stalks (the “styles”) extending out individual flower tubes less than 1 mm
- Bracts around the flower heads are long and tapered
- **Leaves point upward, with the top leaves extending above the flower head**
- Leaves are shallowly lobed, have somewhat weak spines, and are woolly on the underside (sometimes slightly woolly on the top)
- Plant grows up to 7 feet tall



**Brownie Thistle (*Cirsium quercetorum*)** grows very low to the ground, with a cluster of flowers, each an inch in diameter or more, usually creamy white. Among other places, they are found along the bluff trail north of Salal Creek and bloom from May through July.



**Coyote Thistle (*Eryngium* spc)** There are several dozen species of native plants in this genus,



many of which are rare and some of which are classified as Protected or Threatened species. Coyote thistles are in the carrot family, perennial plants with foliage that dies back in the winter, with new growth from the rootstock in the spring. Reproduction is from wind blown seeds. Coyote thistle's stiff sharp bluish-green spiny bracts give the flower heads a distinctive star-burst shape. These lovely low-growing perennials will give you a sharp stab if you should happen to touch or sit on one.

**Cobweb Thistle** (*Cirsium occidentale* var. *occidentale*) has a more grey appearance overall, grows 2-4' tall, likes full sun, and is found in generally drier places from sandy beaches to hillsides. It blooms Apr-June. Like the Cluster Thistle, the flowers are laced with cobweb-like fibers.



## Thistles to Pull

The invaders will out-compete more desirable plants for water, nutrients and space, and can take over since fewer insects co-evolved with them to keep their numbers down. Many are found in disturbed areas. Since viable seeds live in the soil for many years, digging and construction may expose seed and reduce or remove other plants whose shade prevents thistles from thriving. Each plant produces thousands of seeds, and many will be viable in the ground for ten years or more.

The best way to get rid of thistles is to pull them when the ground is moist. Jon Raymond of the Native Plant Committee and CLC Committee suggests, "The next best way is to cut the stem at the ground, especially before flowering. As most are biennials, they will not flower in future years and may not re-sprout in the second. If you have to dig out the root, use a very narrow shovel or a hand hoe to loosen, and then pull the root out." The best time to eradicate them is before they develop buds. If buds or flowers have developed, those parts of the plant should be bagged before disposal, not composted, as they may contain viable seeds. It is important to disturb the soil as little as possible and leave surrounding plants, since disturbance may provide a way for the long lived seed bank to sprout.

Below in the order that they bloom are four weedy thistles: Milk Thistle, Italian Thistle, Bull Thistle and Canada Thistle. Here are some tips on how to recognize them.



**Milk Thistle** (*Silybum marianum*) A native of the Mediterranean, is a winter annual/biennial that begins to grow with the fall rains, and will bloom from spring into fall. **Low growing thorny leaves mottled with large white spots grow in a radiating cluster close to the ground**, and a sparsely branched stem can grow up to 6 feet, though usually not that tall. Flower heads are  $\frac{3}{4}$  inch to over 2 inches wide, pink to purple. Dig out the taproot before flowering time.



**Italian Thistle** (*Carduus pycnocephalus*) is next to bloom, a winter annual that begins germination with the fall rains. It usually comes into bloom in late spring. Its leaves are white-woolly below, hairless-green above, and deeply cut into two to five pairs of spiny lobes. The terminal lobe spine grows longer and more rigid than the other spines. Stems are spiny and slightly winged. Flower heads are covered with densely matted, cobwebby hairs. The thimble-sized, rose to pink to purple flowers (less than  $\frac{1}{2}$  inch wide) are clustered in groups of two to five. The stems are light green, often with several side branches angling upward. **Cut the stem at least four inches below ground level**, and bag any heads that are in bud or bloom.



**Bull Thistle** (*Cirsium vulgare*), is a biennial which takes two years to grow and flower. It blooms from summer into fall, with branching stems reaching 1-6 feet in height. The purple flower heads are an inch wide or a little larger. The darker green base cluster of leaves forms the first year, and the flowering stem appears the second year. The leaf has a long tip like a spear with side barbs. The taproot is around 2 feet long, but a shovel can be used to cut it off 1-2 inches below ground. Any buds or flowers should be bagged to dispose.



**Spiny Sow Thistle** (*Sonchus asper*) Very common annual weed of the daisy family found in disturbed areas, vineyards, pastures, gardens, roadsides, wetlands and coastal dunes. The leaves are bluish-green, simple, lanceolate, with wavy and sometimes lobed margins, covered in spines on both the margins and beneath. The base of the leaf surrounds the stem. The leaves and stems emit a milky sap when cut. One plant will produce several flat-topped arrays of flower heads, each head containing numerous yellow ray flowers but no disc flowers.





**Canada Thistle** (*Cirsium arvense*) is not originally from Canada, but from the eastern Mediterranean. A perennial plant, it is probably the hardest to control of the weedy thistles here, for two reasons. Only one week after the flowers are pollinated, the seeds are ripe and ready to germinate. Also, this tap-rooted plant sends out horizontal roots at a rate of as much as ten feet a year. A root fragment as small as 1/8 inch can

generate a new plant. Canada Thistle usually flowers short time after Bull Thistle, summer into fall. Getting rid of these plants is very difficult. Root fragments and seeds left in the soil will sprout easily. The best time to go after the plant is late winter, pulling and attempting to get out all of the root. After weeding an area, it is best to plant appropriate native plants to shade out young thistle seedlings. If not replanted, the site must be revisited at least twice yearly to destroy any new sprouts.



Bull thistle rosette



Canada thistle rosette



Native Cluster thistle rosette



Below are some questions to help you determine whether your thistle is native or not:

- Is the thistle spiny along the entire length of the stem? (a YES answer indicates Italian thistle or bull thistle)
- Are the bracts triangular, firm, and spine-tipped? (a YES answer indicates Italian thistle)
- Are the bracts thick, and leathery, and jagged? (a YES answer indicates milk thistle)
- Are the roots rhizomatous? (a YES answer indicates Canada thistle)

If the answer to all of these questions is "NO", it is likely you have a native thistle! Yea!!! Great for native bees and butterflies!