

PAMPASGRASS IN HUMBOLDT COUNTY

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Humboldt County is well known for its tall Redwood trees. Along with our tall Redwoods, we have a tall grass. The grass is known as Pampasgrass (*Cortaderia*). This escaped ornamental has invaded over 8,000 acres of our Redwood cut-over land.

There are about 2,000 acres of Pampasgrass at Big Lagoon, on Empire and Mendocino soil series, with about 25 acres on beach sand. The largest acreage of escape is at the head of Elk River, east of Eureka, consisting of over 6,000 acres, and is primarily on Larabee soil series. Scattered plants have been observed on Melbourne, Hugo, Orick, Masterson, and Sites soil series.

Pampasgrass (*Cortaderia*) is a genus of about 25 species, primarily of the southern hemisphere. Hitchcock's Manual of Grasses describes two species: *C. seloana* and *rudiuscula*, as dioecious. No male plants have been found in either area--over 10,000 plants have been examined. Our's has not been identified as to species although plant material has been sent to Dr. H. E. Connors of New Zealand, and to Dr. H. J. Conert of Frankfurt, Germany (the world expert on the genus *Cortaderia*) for positive identification.

Dr. H. E. Connors, Botany Division, Department of Scientific and Industrial Research, Christchurch, New Zealand, has made extensive studies of the breeding systems of *Cortaderia*. He states:

"Gynodioecism, the presence of hermaphrodite and female plants in populations and an outcrossing breeding system, while common in dicotyledonous genera was not observed as the breeding system in any of the grasses until it was recorded in indigenous *Cortaderia richardii* by Conner and Penny in 1960. This system was later noted in *C. fulvida* and *C. toetoe* (both indigenous species) by Conner in 1963, and more recently in *C. selloana* naturalized in New Zealand, and in two other South American species." Conner, H. E. (1965) Breeding Systems in New Zealand Grasses VI. Control of Gynodioecism in *Cortaderia Richardii* (Endl) Zotov New Zealand Journal of Botany, December, 1965, pp 233-42.

It appears that this species has a similar breeding system. The State Seed Laboratory reported a 49% germination on seeds which were sent to them. It appears that each plume has many thousands of seed which are air-distributed.

An interesting feature of our *Cortaderia* is the stolons. Reference to this feature has not been noted in the literature.

It is palatable to cattle. In fact, they seem to relish it. New Zealand reports that they average 800 cow days per acre per year grazing dairy cows on it.

It is being range-tested now in Humboldt County. Out-plantings have been made on all the major grassland soils with excellent survival. It holds promise of being an excellent winter feed.