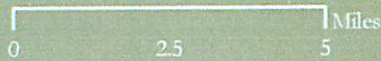




The Cedars Location

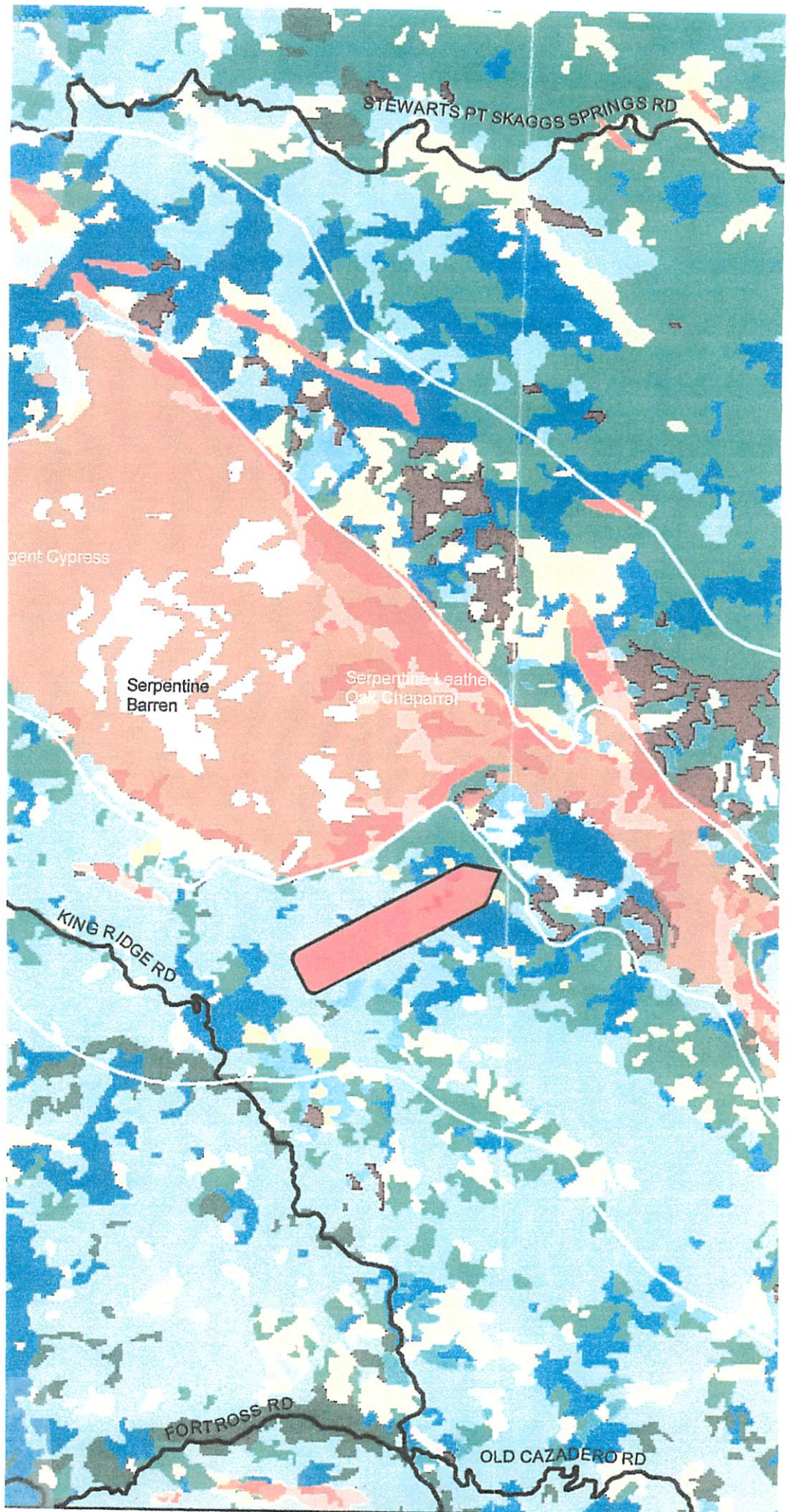


SONOMA LAND TRUST



Vegetation Type

- Agriculture
- Barren/Rock
- Bishop Pine Forest
- Black Oak Forest / Woodland
- Blue Oak Forest / Woodland
- Blue Oak- Foothill Pine Woodland
- California Bay Forest
- Canyon Live Oak Forest
- Central Coast Riparian Forests
- Chamise Chaparral
- Coast Live Oak Forest / Woodland
- Coastal Scrub
- Cool Grasslands
- Douglas Fir Forest
- Eucalyptus
- Grand Fir
- Hot Grasslands
- Interior Live Oak Forest / Woodland
- Sargent Cypress*
- Mixed Chaparral
- Mixed Montane Chaparral
- Moderate Grasslands
- Montane Hardwoods
- Monterey Cypress Forest
- Monterey Pine Forest
- Non-native/Ornamental Grass
- Non-Native/Ornamental Shrub
- Oregon Oak Woodland
- Ponderosa Pine Forest (Non-Maritime)
- Redwood Forest
- Sargent Cypress Forest / Woodland
- Serpentine Barren
- Serpentine Conifer
- Serpentine Grassland
- Serpentine Hardwoods
- Serpentine Leather-Oak Chaparral
- Tanoak Forest
- Urban
- Warm Grasslands
- Water

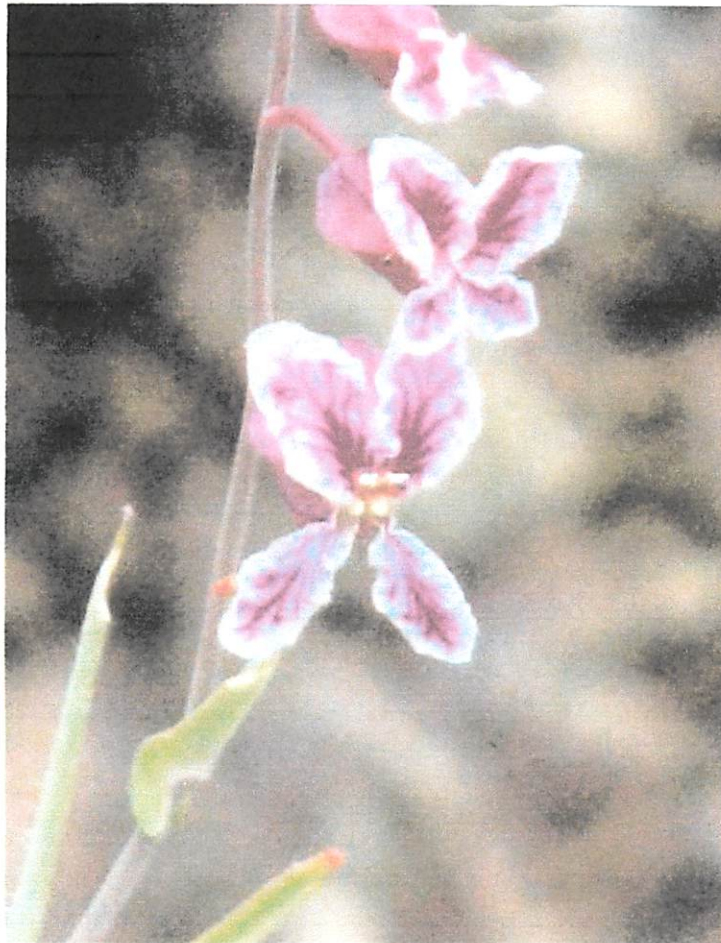


This vegetation data layer is a product of the Bay Area Open Space Council Upland Goals Project. It incorporates existing vegetation and habitat data as well as input from local experts. While this is the best spatial data available, it has not been field tested.

*This vegetation type was miscategorized in the Upland Goals data as MacNab Cypress. The label has been adjusted to reflect field knowledge.

East Austin Creek Conservation Bank

April 2009 botanist, Roger Raiche, visited Devil Creek and documented plants unique to the site such as: *Eriogonum compositum*, large-leafed buckwheat and *Streptanthus glandulosus* ssp. *Secundus* (var. *hoffmanii*), Hoffman's form of bristly jewel flower shown in the photo below.



Special Plants found in The Cedars:

Cedars Endemics:

- *Arctostaphylos bakeri* ssp. *sublaevis*, Cedars' manzanita. Type locality
- *Calochortus raichei*, Cedars' Globe Lily. Type locality.
- *Epipactis gigantea* f. *rubrifolia*, burgundy leafed stream orchid. Type locality
- *Erigeron serpentinus*, serpentine fleabane. Type locality.
- *Holodiscus dumosus* ssp. (*novae?*), Cedars creambush. An unnamed disjunction of the Rocky Mt. creambush, limited to The Cedars. Although this plant has never been botanically "described", it's clearly a unique plant of The Cedars.
- *Streptanthus morrisoni* ssp. *hirtiflorus*, Dorr' s Place jewelflower. Type locality.
- *Streptanthus glandulosus* ssp. *secundus* (var. *hoffmanii*), Hoffman's jewelflower. Named for an amateur botanist who explored The Cedars in the 40's and 50's, it is only found within the main block of peridotite, whereas another variant is found on the periphery (see next group).

Serpentine Associated Plants or Plants of Special Distribution Found at The Cedars:

- *Adiantum capillus-veneris*, Venus maidenhair fern. Only station in Sonoma County of this more interior/desert seepage plant.
- *Aquilegia eximia*, serpentine columbine. From Mendocino County southward, almost always on serpentine.
- *Arctostaphylos viscida* ssp. *puichella*, sticky manzanita. Becomes limited only to serpentine soils from Humboldt and Trinity Counties southward to Sonoma County.
- *Asclepias solanoana*, serpentine milkweed. A north of the Bay serpentine endemic.
- *Aspidotis densa*, Indian's dream, serpentine lace fern. Limited to serpentine in Coast Ranges.
- *Boschniakia strobilaceae*, ground cone. Rarely seen in Bay Area.
- *Brodiaea stellaris*, star brodiaea. Mostly found on serpentine North of the Bay.
- *Calamagrostis ophitidis*, serpentine reed grass. Rare grass of serpentines in larger Bay Area.
- *Calystegia collina* ssp. *oxyphylla*, St. Helena morning-glory. Limited mostly to serpentines of the North Bay.
- *Campanula griffinii*, Griffin's annual bellflower. Rarely collected, from Bay Area serpentines.
- *Cardamine californica* var. *sinuate* (Cedars' race), milkmaids, toothwort. A widespread plant, but here producing a race with heart-shaped corm leaves that "mimic" the appearance of serpentine, with silver, gray and purple coloration. The first "spring" wildflower, actually a winter flowering plant that may be in seed by late April.
- *Carex mendocinensis*, Mendocino sedge. Seepage sedge mostly found on serpentine.
- *Ceanothus jepsonii* (ssp. *jepsonii*), Jepson musk brush. Restricted entirely to serpentines of the North Bay.
- *Cordylanthus pringlei*, Pringle's birdsbeak. Restricted to serpentines mostly of the inner North Coast Ranges, but makes it W to Cedars.
- *Cupressus sargentii*, Sargent cypress. A full serpentine endemic of the Coast Ranges. It occupies nearly every habitat within The Cedars, producing huge trees along the creekbeds, or 18" stunted "bonsai" looking specimens on upper barrens.
- *Cypripedium californicum*, California lady-slipper orchid. The Cedars represents the current southernmost occurrence of this lovely serpentine identified orchid.
- *Eriogonum ternatum*, ternate buckwheat. Relatively common in northwest California's Klamath Range but jumps down to The Cedars, its southernmost occurrence.
- *Eriophorum criniger*, cotton grass sedge. The Cedars is the southernmost occurrence of this

more northern seepage sedge.

- *Fremontodendron californicum* (ssp. *napense*), very rare within The Cedars, this is the westernmost population.
- *Minuartia douglasii*, Douglas' annual sandwort. A talus annual, most commonly on serpentine soils.
- *Moehringia macrophylla*, large-leaf moehringia. Only Sonoma County station for this plant.
- *Monardella viridis*, green deer mint. Westernmost populations of this Napa volcanic identified plant.
- *Muhlenbergia andina*, muhly grass. Only Sonoma County station for this plant and westernmost in its range—typically of the Inner Coast Ranges.
- *Parnassia californica*, Californian “grass”-of Parnassus. One of few sites in Sonoma County.
- *Phacelia corymbosa*, serpentine phacelia. Wide-spread on serpentine but often widely separated.
- *Phlox speciosa* ssp. *nitida*, showy phlox. Southernmost limit here at The Cedars. Rare in County.
- *Quercus durata*, leather oak. Almost always found on serpentine areas south of Humboldt County.
- *Rhamnus tomentella*, hoary coffeeberry. Almost always found on serpentine in the North Bay Counties, though more widespread North and East.
- *Salix breweri*, Brewer's dwarf willow. Common especially on serpentines of the Inner Coast Ranges, here quite close to coast. Quite variable at The Cedars, whereas many populations in California seem remarkably identical-looking.
- *Stachys albens*, woolly hedge nettle. Very commonly found in serpentine seepages.
- *Streptanthus barbiger*, bearded jewel flower. Restricted to serpentines of the North Coast Ranges. Many distinctive races found throughout its range, these being low and heavily branched from bottom. This is another jewel flower that seems to be speciating due to geographic segregation.
- *Streptanthus glandulosus* ssp. *secundus* (var. *sonomensis*), Sonoma County jewel flower. Known only from a few dozen sites in Marin and Sonoma Cos. Interestingly two races of this species of jewel flower occur at The Cedars; this race with white flowers being found outside of the main canyons and the *Hoffmanii* race with rose pink flowers found only inside the canyon system.
- *Streptanthus morrisonii* (ssp. *morrisonii*), Morrison's jewel flower. Restricted to extreme serpentine barrens in the North Bay and one population in Monterey County. This species is a marvelous example of a plant currently speciating, i.e., forming distinct, new variants restricted by geographic segregation.
- *Xerophyllum tenax*, bear “grass”. Widespread north into the mountains of the Pacific NW, it occupies “odd” soils as it becomes separated in the S part of its range. There are only two areas within the entire Cedars where it occurs.

Habitat and Plant Information by Roger Raiche

Primary Habitats found within The Cedars Core Serpentine Zone:

Some of the main types of vegetation habitats are listed below (note most of these have multiple exposure phases (i.e., North, Southeast or West-facing, along with considerable slope variation - vertical to flat):

- Mixed evergreen woodland (serpentine phase) with cypress as a minor component.
- Cypress dominated mixed evergreen woodland.
- Cypress dominated serpentine chaparral.
- Chaparral without or with few cypress.
- Talus, landslide and barrens — both stable and shifting.
- Rock outcrops (solid).
- Riparian woodland with cypress.
- Riparian thickets (on bedrock, mortarbed or alluvium).
- Alluvial gravel bars.
- Non-ultrabasic seepages, springs and pools.
- Ultrabasic seepages and springs.
- Winter wet areas/summer dry.
- Carbonate formations.
- Disturbed sites (mining, roads, building sites, and pig damaged area).

Primary Habitats found in the Contact Zone:

Because of the large size of the periphery of The Cedars (in the strict sense), this “contact zone” (between the serpentines and non-serpentines) contains a very rich mix of species and some distinct habitats not found within the canyon system. In a purely demographic sense, these areas represent the largest number of species, as serpentine and non-serpentine taxa mix back and forth on substrates of various compositions and blends. However, other than some of the areas of the Campbell Ranch and near Red Slide Falls, these areas have been the least botanized, so much less is documented concerning their nature and species compositions. Some of the primary known habitats are below:

- Sargent cypress woodland (often mixed with mixed evergreen woodland elements).
- Serpentine chaparral/non-serpentine chaparral mixes.
- Open serpentine grasslands and non-serpentine grasslands.
- Seepages and springs (non-carbonate)
- Riparian corridor.
- Redwood forest/mixed evergreen woodland.
- Coast live oak savannah.
- Extensive contact zone overlap.

California Natural Diversity Database

Cazadero Quad

CNDDDB for Cazadero Quad (plus additions from stream surveys and botanists)

QUAD NAME	ELMCODE	SCI NAME	COM NAME	FED STATUS	CAL STATUS	DFG STATUS	CNPS LI
Cazadero		<i>Onchorynchus kisutch</i>	coho salmon	Endangered	Endangered		
Cazadero		<i>Onchorynchus mykiss</i>	steelhead	Threatened	Threatened		
Cazadero		<i>Strix occidentalis</i>	spotted owl	Threatened	Threatened		
Cazadero		<i>Asclepias solanoana</i>	serpentine milkweed	None			
Cazadero		<i>Eriogonum ternatum</i>	ternate buckwheat				
Cazadero		<i>Eriogonum compositum</i>	large-leafed buckwheat				
Cazadero		<i>Trifolium depauperatum</i>	puffy clover				
Cazadero		<i>Trifolium furcatum</i>	bull clover				
Cazadero	AAABH01022	<i>Rana draytonii</i>	California red-legged frog	Threatened	None	SSC	
Cazadero	AAABH01050	<i>Rana boylei</i>	foothill yellow-legged frog	None	None	SSC	
Cazadero	AFCJB19025	<i>Lavinia symmetricus parvipinnis</i>	Gualala roach	None	None	SSC	
Cazadero	AMACC05030	<i>Lasiurus cinereus</i>	hoary bat	None	None		
Cazadero	AMAFF23030	<i>Arborimus pomo</i>	Sonoma tree vole	None	None	SSC	
Cazadero	ARAAD02031	<i>Actinemys marmorata marmorata</i>	northwestern pond turtle	None	None	SSC	
Cazadero	ICMAL27010	<i>Syncaris pacifica</i>	California freshwater shrimp	Endangered	Endangered		
Cazadero	NLLEC5P420	<i>Usnea longissima</i>	long-beard lichen	None	None		
Cazadero	PDAST3M5G0	<i>Erigeron greenei</i>	Greene's narrow-leaved daisy	None	None		1B.2
Cazadero	PDAST3M5M0	<i>Erigeron serpentinus</i>	serpentine daisy	None	None		1B.3
Cazadero	PDBRA2G0J4	<i>Streptanthus glandulosus</i> var. <i>hoffmanii</i>	Hoffman's bristly jewel-flower	None	None		1B.3
Cazadero	PDBRA2G0S0	<i>Streptanthus morrisonii</i>	Morrison's jewel-flower	None	None		
Cazadero	PDERI04222	<i>Arctostaphylos bakeri</i> ssp. <i>sublaevis</i>	The Cedars manzanita	None	Rare		1B.2
Cazadero	PDFAB08012	<i>Amorpha californica</i> var. <i>napensis</i>	Napa false indigo	None	None		1B.2
Cazadero	PDFAB402W0	<i>Trifolium buckwestiorum</i>	Santa Cruz clover	None	None		1B.1
Cazadero	PDMAL110FL	<i>Sidalcea malviflora</i> ssp. <i>purpurea</i>	purple-stemmed checkerbloom	None	None		1B.2
Cazadero	PDPLM09140	<i>Leptosiphon jepsonii</i>	Jepson's leptosiphon	None	None		1B.2
Cazadero	PDRHA04160	<i>Ceanothus purpureus</i>	holly-leaved ceanothus	None	None		1B.2
Cazadero	PMCYP032Y0	<i>Carex comosa</i>	bristly sedge	None	None		2.1
Cazadero	PMLIL0D1L0	<i>Calochortus raichei</i>	The Cedars fairy-lantern	None	None		1B.2
Cazadero	PMLIL0G042	<i>Chlorogalum pomeridianum</i> var. <i>minus</i>	dwarf soaproot	None	None		1B.2
Cazadero	PMORC1X050	<i>Piperia candida</i>	white-flowered rein orchid	None	None		1B.2

California Natural Diversity Database (CNDDB) Lists for the Cazadero

CAZADERO QUAD

Record	Scientific Name	Common Name	Federal Status	California Status	DFG Status	CNPS List
1	<i>Rana draytonii</i>	California red-legged frog	Threatened	None	SSC*	
2	<i>Rana boylei</i>	foothill yellow-legged frog	None	None	SSC*	
3	<i>Lavinia symmetricus parvipinnis</i>	Gualala roach	None	None	SSC*	
4	<i>Lasius cinereus</i>	hoary bat	None	None		
5	<i>Arborimus pomo</i>	Sonoma tree vole	None	None	SSC*	
6	<i>Actinemys marmorata</i>	western pond turtle	None	None	SSC*	
7	<i>Syncaris pacifica</i>	California freshwater shrimp	Endangered	Endangered		
8	<i>Usnea longissima</i>	long-beard lichen	None	None		
9	<i>Erigeron greenii</i>	Greene's narrow-leaved daisy	None	None		1B.2
10	<i>Erigeron serpentinus</i>	serpentine daisy	None	None		1B.3
11	<i>Streptanthus glandulosus</i> var. <i>hoffmanii</i>	Hoffman's bristly jewel-flower	None	None		1B.3
12	<i>Streptanthus morrisonii</i>	Morrison's jewel-flower	None	None		
13	<i>Arctostaphylos bakeri</i> ssp. <i>sublaevis</i>	The Cedars manzanita	None	Rare		1B.2
14	<i>Amorpha californica</i> var. <i>napensis</i>	Napa false indigo	None	None		1B.2
15	<i>Trifolium buckwestiorum</i>	Santa Cruz clover	None	None		1B.1
16	<i>Sidalcea malviflora</i> ssp. <i>purpurea</i>	purple-stemmed checkerbloom	None	None		1B.2
17	<i>Leptosiphon jepsonii</i>	Jepson's leptosiphon	None	None		1B.2
18	<i>Ceanothus purpureus</i>	holly-leaved ceanothus	None	None		1B.2
19	<i>Carex comosa</i>	bristly sedge	None	None		2.1
20	<i>Calochortus raichei</i>	The Cedars fairy-lantern	None	None		1B.2
21	<i>Chlorogalum pomeridianum</i> var. <i>minus</i>	dwarf soaproot	None	None		1B.2
22	<i>Piperia candida</i>	white-flowered rein orchid	None	None		1B.2