



## River Partners' Field Notes VELB Monitoring May and June 2010

**On May 18, 2010 at approximately 2:15 P.M.** a River Partners biologist observed a male Valley Elderberry Longhorn Beetle (VELB) on a blue elderberry transplant at the Feather River Setback Levee Valley Elderberry Longhorn Beetle Mitigation Area. The beetle was first viewed on a dead stem about 2.5 feet from the ground surface moving toward the distal end of the stem. He was traveling on the top surface of a dead primary branch. The beetle stopped when he reached a location on adjoining tertiary (dead) branch and remained stationary for several minutes. The beetle was gone several minutes later; the biologist did not observe his departure from the stem.



Male VELB



Transplant #109

**On May 20, 2010 at approximately 10:15 A.M.** a River Partners biologist observed a female Valley Elderberry Longhorn Beetle (VELB) on a blue elderberry transplant at the Feather River Setback Levee Valley Elderberry Longhorn Beetle Mitigation Area. The beetle was discovered on the top surface of a distal leaf approximately 4 feet from the ground. She was observed for approximately 30 minutes, during which time she intermittently traveled between leaflets and ultimately moved upward and toward the interior of the shrub. She commonly remained stationary and frequently lifted the center leg on the left side of her body; staff is currently seeking an explanation for this behavior. At one point she fed at the margin of a leaflet.



Female VELB





VELB traveling between leaflets



VELB female with center leg lifted



VELB feeding on the leaf margin



Transplant; VELB location circled in red

**Star Bend VELB sightings**  
**June 2<sup>nd</sup>, 2010**  
**River Partners**

On June 2<sup>nd</sup>, 2010, at 10:50 A.M., while monitoring elderberry transplants at the Star Bend restoration area, a River Partners biologist observed a female Valley Elderberry Longhorn Beetle (female VELB #1). The beetle was traveling on the soil surface toward transplant SB-34, and was initially located approximately 5 feet from the southern edge of the transplant basin. The beetle moved quickly to a small bunch of dried grass where she remained motionless for about one minute, presumably hiding. She then darted to the base of an empty brown glass bottle discarded onsite. She remained pressed against the base of the bottle for several minutes (below). Approximately 30 minutes later she had departed, possibly having moved into the interior of the basin, given her earlier trajectory.

At 10:58 A.M. a male VELB was observed on a neighboring elderberry transplant (SB-37). The male was located on the above side of a leaflet on a stem less than one inch in diameter (at the ground surface), in a distal location relative to the shrub center, approximately 1.5 feet from the ground. The male remained fairly stationary for the 25 minute observation period. Interesting behaviors included bringing his left, front leg, and later, his left antenna, to his mouthparts, possibly to clean them. In addition, the beetle wiped the tip of his abdomen with his left, rear leg several times.

While observing the male VELB, the biologist noticed a female VELB (#2) with deformed or damaged wings and elytra feeding on a leaf approximately 1.25 feet from the male. She was initially positioned on the interior side of a leaflet on a stem less than one inch in diameter (at the ground surface), in a distal location relative to the shrub center, approximately 2.5 feet from the ground. The stem base was within inches of the base of the stem on which the male was located. The female was initially observed feeding on the upper margin of the leaflet. She proceeded to climb over the leaf edge and thereafter remained fairly stationary for about two minutes. She raised her left, center leg, possibly scenting the air for mating pheromones (Meghan Gilbert, personal communication). She then traveled to a neighboring leaflet where she intermittently raised her left, center leg again. After several minutes, she moved to an adjacent leaflet.

The biologist observed the male and female VELB for approximately 25 minutes before resuming work monitoring the transplants onsite. At 2:48 P.M. the beetle location was revisited. The male was located on the same leaf, while a good portion of the leaf had been eaten. The female had relocated.





Female VELB #1 hiding within a small bunch of dried grass near elderberry transplant  
SB-34



Female VELB #1 pressed against the bottom of a discarded bottle





Elderberry transplant SB-34



Male VELB with left antenna brought to mouth



Male VELB wiping tip of abdomen with rear, left leg



Female VELB #2 feeding on leaf margin

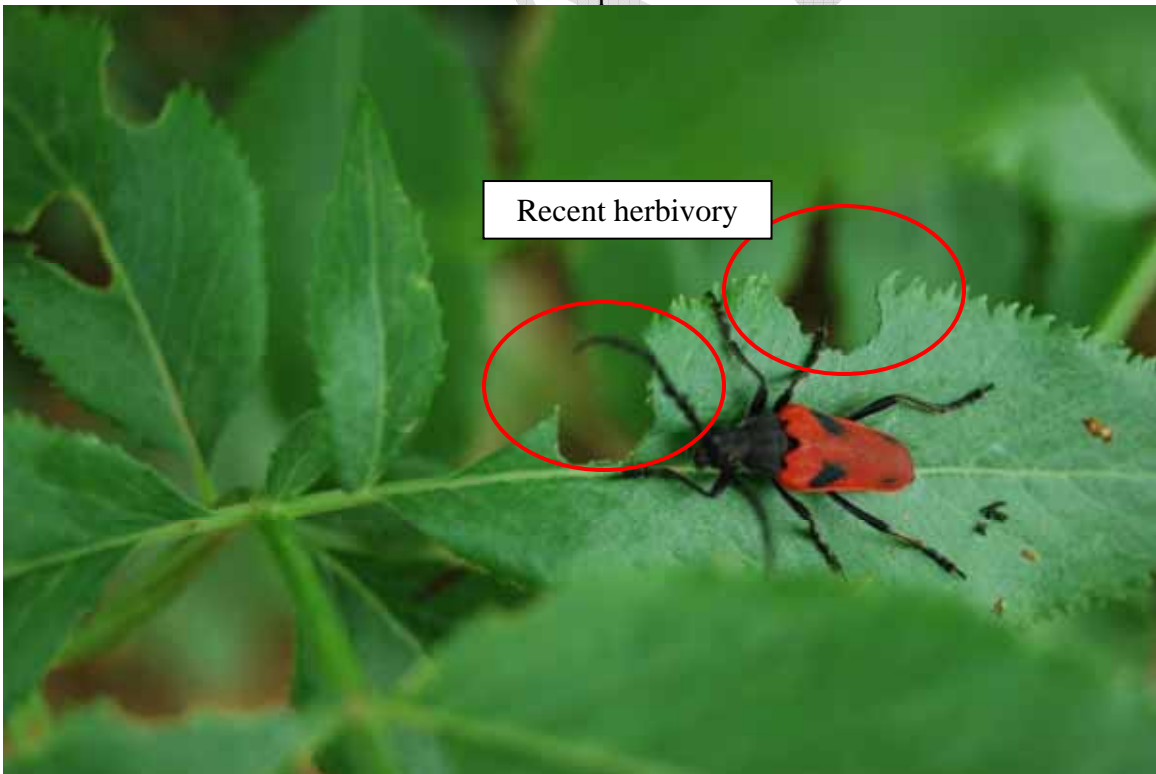


Female VELB #2; a look at her deformed/damaged wings and elytra





Male VELB and female VELB #2 positions relative to one another



Male VELB #2 approximately 3 hours after initially seen; note the missing leaf tissue



Elderberry transplant SB-37