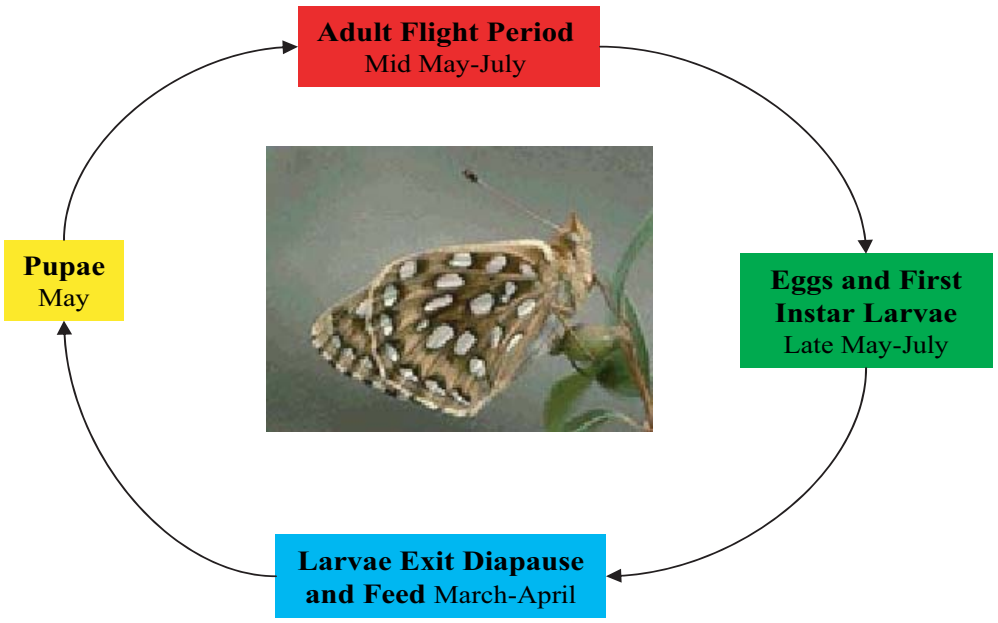
Callipe Silverspot Butterfly Life Cycle and Pressures Model

Biology: In May, after the fifth instar phase, larvae begin pupating. They remain in the pupal stage for about two weeks before emerging as adults.
Pressures: Same as for larvae

Biology: Adults live approximately 3 weeks sometime between mid May to the end of July. Males and females encounter each other on the tops of hills, a behavior referred to as hilltopping. Courtship entails a joint flight pattern involving ascending, spiral or circular motions. After mating females search for host plant stands where they lay their eggs on the dried remains of Johnny Jump-up. Adults have flexible nectaring requirements, using a variety of plants. Nectaring occurs in conjunction with hilltopping, traveling, sunning, but not while laying eggs.
Pressure: Habitat loss and fragmentation form urbanization, highways create barriers to dispersal, butterfly collectors and potential poisoning from pesticide drift.



Biology: Once the eggs are laid, they take approximately a week to hatch. After hatching, the larvae eat their egg shells, spin a silken pad on which they rest, and then enter into a long summer and winter diapause.
Pressures: Habit loss due to urbanization, possibly overgrazing and chemical contaminants such as pesticides.

Biology: The first instar larvae exit their diapause and begin to feed in the late winter and spring when the violets begin to produce new growth and flower. At first they feed on the petals and later various other parts of the plant. Feeding occurs in the late afternoon and evening to avoid daytime predation.
Johnny Jump-up (*Viola pedunculata*) Biology: Johnny Jump-up is a low-growing plant with yellow flowers which blooms from early January through April. By mid-summer, the flowers and the leaves are dried up and difficult to find and identify. Johnny Jump-up can be found in a diversity of grassland types throughout the state, but in Solano County the densest stands occur on shallow, rocky or thin soils where the annual introduced grasses are less dense
Pressures: Habitat loss from urbanization, invasive introduced plants, inappropriate grazing regimes and pesticide drift.