

Table 5-6. Natural Community Acquisition Patch Size, Configuration, and Habitat Connectivity Considerations Based on Planning Species

<i>Planning Species</i>	<i>Natural Communities Addressed by the Species</i>	<i>Minimum Size/Configuration Considerations</i>	<i>Habitat Connectivity Considerations</i>	<i>Covered Species Habitat Needs Provided For</i>
American badger	Grasslands, vernal pool grasslands	Variable home range of between 395 to 2,100 acres (Messick and Hornocker 1981). Minimum patch size is 400 acres to correspond with the lower home range estimate from Messick and Hornocker 1981).	Connectivity is essential for home range and dispersal movements and to facilitate protection of badger population. Set connectivity goals to create multiple intact contiguous preserves of 1,200 acres to meet the average home range estimate (Messick and Hornocker 1981).	<ul style="list-style-type: none"> ▪ Western spadefoot ▪ Vernal pool fairy shrimp ▪ Vernal pool tadpole shrimp ▪ Conservancy fairy shrimp ▪ California horned lizard ▪ California red-legged frog ▪ Tri-colored blackbird ▪ White-tailed kite ▪ Swainson’s hawk ▪ Bald eagle ▪ Peregrine falcon
Black-tailed deer (migratory herds – mid-elevation foothills and higher elevations)	Oak woodlands and savanna, Also includes stream corridors and foothill riparian habitats.	As a species that migrates through the study area, large patch sizes would be required to manage habitat for deer. Mule deer home ranges are large and variable in size (96 – 7,112 acres [Kie et al 2002]). Minimum patch size for purposes of managing this landscape should be correspondingly large. Preserved patches should be at least 300 acres and contiguous with other protected habitat areas to allow for unobstructed movement through the plan area. The location and configuration should be based on proximity to high resident deer use areas or known migratory routes.	Connectivity of suitable deer habitat through the planning area is essential for migratory herds. Prioritize preservation of habitat areas that provide connectivity with other habitat areas to provide movement corridors for resident and migratory herds.	<ul style="list-style-type: none"> ▪ White-tailed kite ▪ Swainson’s hawk ▪ Yellow-breasted chat ▪ California horned lizard ▪ Foothill yellow-legged frog ▪ Valley elderberry longhorn beetle

Table 5-4. Natural Community Acquisition Patch Size, Configuration, and Habitat Connectivity Considerations (continued)

<i>Planning Species</i>	<i>Natural Communities Addressed by the Species</i>	<i>Minimum Size/Configuration Considerations</i>	<i>Habitat Connectivity Considerations</i>	<i>Covered Species Habitat Needs Provided For</i>
Yellow-breasted chat <i>Icteria virens</i>	Riparian scrub	Minimum patch size of 10 acres for a breeding territory (territory size ranges from 0.2 to 10 acres [Zeiner et al. 1990, Gaines 1974]). Recommend minimum preserved patch size of 20 acres.	Preserve drainages with existing continuous woody riparian cover or that could be restored to provide continuous cover to provide for movement and expanding distribution.	<ul style="list-style-type: none"> ▪ California red-legged frog ▪ Foothill yellow-legged ▪ Valley elderberry longhorn beetle
Western yellow-billed cuckoo	Cottonwood-willow riparian forest	At least 25 acres (Gaines 1974) of mature cottonwood/willow riparian forest in a linear configuration along drainages. Habitat patches should be at least 330 feet wide and at least 990 feet long (Gaines 1974), with preservation priority given to patches greater than 50 acres and with widths over 660 feet (defined as suitable habitat by Laymon and Halterman [1989]).	Preserved habitat should be located within drainages that generally provide continuous canopy cover along its length to promote movement. Does not require continuous breeding habitat, but at least cover and roosting habitat.	<ul style="list-style-type: none"> ▪ Swainson’s hawk ▪ White-tailed kite ▪ Bald eagle ▪ Valley elderberry longhorn beetle ▪ Bank swallow
White-fronted goose (covers wintering waterfowl, including northern pintail as recommended by the Science Advisors)	Foraging habitat consists of rice, irrigated pasture, irrigated cropland, and managed wetland	Optimal minimum patch size for foraging habitat is 250 acres based on the area required to minimize effects of human disturbance (Delta Wetlands Project HEP model, unpubl.). Recommend minimum patch size of 160 acres which provides near optimal disturbance minimization values and corresponds to a standard agricultural land parcel.	To facilitate protection of large intact agricultural and wetland landscapes for waterfowl and related species, prioritize acquisitions to create multiple management units of at least 500 contiguous acres (this doubles the optimum patch size as per the Delta Wetlands Project HEP model).	<ul style="list-style-type: none"> ▪ Swainson’s hawk ▪ Bald eagle ▪ Peregrine falcon ▪ Greater sandhill crane ▪ Western burrowing owl ▪ Tri-colored blackbird ▪ Giant garter snake ▪ California black rail