

NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION PRACTICE SPECIFICATION

## 649L – STRUCTURES FOR WILDLIFE, RAPTOR PERCH POLE

### I. SCOPE

Install artificial perching structure where suitable natural perch sites are not currently available because of land management activities or catastrophic fire. The structure is designed and installed to provide for protected resting, roosting, eating and to encourage hunting by raptors and owls.



### II. AREA AND TIMING

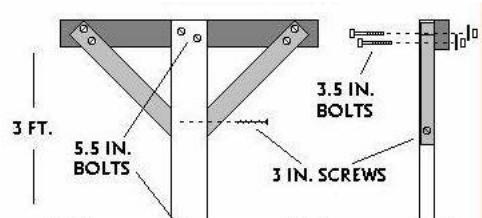
The areas to be treated shall be shown on the plans and, the methods used, target species, and timing of treatment are all identified on the practice Implementation Requirements Sheet and applicable supporting materials. Perches may be installed at any time of the year. It is best to avoid installation during the breeding season to avoid interference with breeding activities that may affect behavior of adults or juveniles. Across much of California the breeding season is typically from March 1 – July 15. Check with your local biologists for regional variations due to elevation and longitude.

### III. PLANNING AND GENERAL REQUIREMENTS

#### Criteria for Design and Construction

- Perch Pole(s) must be anchored in the ground at a depth of at least **3 to 6 ft**, depending on the use of concrete to support the pole. Concrete extending down 6' may be needed where soils are not well compacted after installation, or pressure to pole during maintenance may shift the stability of the pole. Where concrete is not used, the minimum depth of buried pole shall be 4 feet and soil type capable of sufficient compaction to keep pole vertical. Material used to anchor pole(s) must be of a construction grade which can endure adverse climatic changes for a period of at least 10 years.
- Perch Pole(s) must be set at a height between 12-15 feet above ground.
- Wooden Perch Pole(s) must have a diameter no less than 3 to 4 inches.
- Galvanized steel poles must be at least 1 ½" diameter at a length of 20 feet. Another option is to attach two 10' length galvanized pipe with a 1 ½ threaded sleeve (Figure 1).
- Perch Pole(s) must have a wood perch cross bar and must be made with a minimum of 2" X 2" wood board. Rounded edges are optional. Perch(s) must be a minimum of 2' in length.

- Perch Pole (s) made of wood post and cross bar must have a wood support board, placed diagonal from the perch cross bar to the pole. Dimensions for the support board must be at least 2 X 2 inch but preferably 2"x 4". The support board must be attaching from the end of each cross bar to the perch pole.



- A second perch cross bar with supporting diagonal support board at the same dimension as above may be added. The second cross bar must be placed 3 feet below the first perch cross bar. This second board is optional, but new data indicates a preference for a single cross bar.
- If using a metal pole with an open top the top must be capped or have a crossbar placed at the top so that there is no access down the pole

## Materials

- Galvanized steel poles at least 1 ½" diameter are typically the best option.
- All constructions can be made of wood material: cedar (preferred, most weather resistant), cypress, redwood, or pine which is at least 3-4" in diameter. Old utility poles can be used only when known not to contain or history of being treated with any toxic substances.
- The vertical perch may be either a 15" x 2" x 2" rounded edge block of cedar, redwood, or pine. Another option for the perch is to weld a 1 ½" to 2" x 15" piece of galvanized steel pipe across the top of the vertical support.
- If perch poles must be placed on a separate wood piece for additional extension of the pole, anchor pole base requires treated wood material. Wood thickness must be 4 to 6 inch or larger. Wood must be connected by a lag bolt with washers and nuts through a hole.
- All nails, woodscrews, and hinges should be rust proof
- At least one cubic foot of concrete shall be used to anchor perch pole, unless exempted by a biologist.
- When appropriate, mineral soil shall be compacted around the base of the pole in layers not to exceed 2" at a time.

## Placement

Distribution of perch poles are not defined specifically and varies greatly among studies reviewed. In orchard situations, perch poles could be as frequent as 1 pole per acre or 1 pole per five acres. However, it is known raptors are territorial, thereby use of higher perch pole density, 1 pole per acre, likely will not equate a high density of raptor use. Initially for all land uses, consider putting out one per 20 acres initially and place more if raptors appear to be competing

Thereby when considering perch pole distribution, rodent populations and areas of high concentration, habitat availability, geographic topography, and historical presents of raptors should be considered.

- Perch poles should be placed on the edge of orchards and must not be obstructed by objects that may detract raptors from landing on the pole
- In forestry scenarios, perch poles can be used however snag density per acre should be considered. Use the same density of 1 pole per acre or 1 pole per five acres.
- Placement near vegetation has been shown to increase usage by some birds.
- **Avoid installing raptor perches within 200' of paved roads, and ¼ mile from a multi-lane highway or freeway, unless exempted by a NRCS biologist**
- Avoid installing raptor perches within 200' of another nest box,
- Avoid installing raptor perches in native grasslands, especially where bird species of concern nest and brood their young

Figure 1

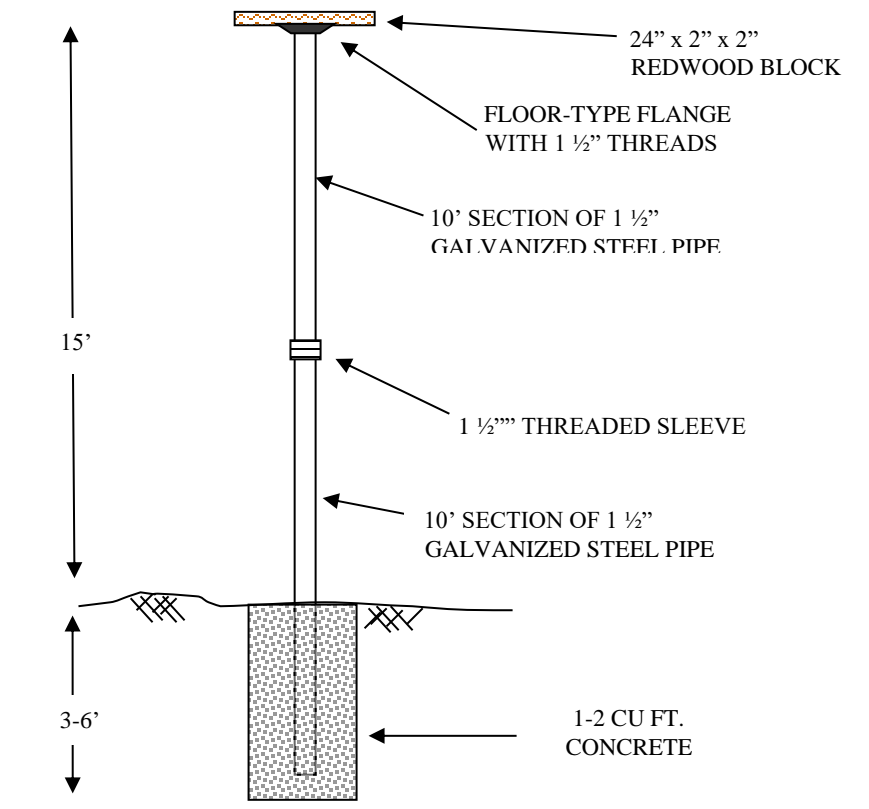
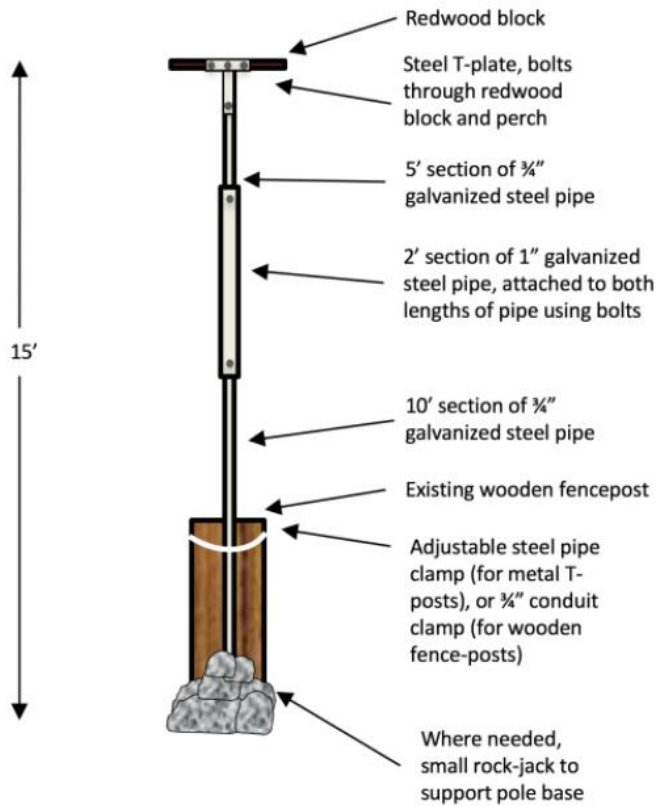


Figure 2 For areas with rocky soils



#### IV. OPERATIONS AND MAINTENANCE

Periodic monitoring is essential to determine if wildlife habitat goals are met and if modifications are needed. Record observations of use by bird species and note preference by location.

- Bolts must be checked annually and tightened as needed.
- Annually monitor cross bars and horizontal perches. Tighten perches when loose and replacement wooden perches when structurally unable to support raptors.