

Figure 42. The Morlan Nelson raptor nesting platform.

## DESIGNING AND INSTALLING NESTING PLATFORMS

In planning the use of nesting platforms, the biologist and engineer should bear in mind the following considerations.

- Nest platforms should be placed on or near poles and towers that have been used previously by nesting raptors (Lee 1977). Although this may not increase raptor density, it may increase line reliability (by moving the nests to safer positions) and nesting success (by minimizing wind damage and heat prostration of unshaded young raptors).
- 2) Biologists should provide guidance, based on species' needs, on where to locate platforms (e.g., ravens prefer higher locations than Buteos; Steenhof et al. 1993).
- 3) Platforms should be placed where conductors and energized hardware will not be fouled by dropped nest material or excrement (Nelson 1980a). Nest platforms erected 121.9 cm (48 in.) above distribution conductors have not been known to cause electrical outages (PacifiCorp, unpubl. data).
- 4) Because raptors (particularly eagles) use updrafts to save energy when hunting and bringing prey to nests, nest platforms should be placed on poles or towers near the face of a rolling hill or escarpment that deflects winds upward (Nelson 1980a). However, platforms are not needed near escarpments or forests along waterways where adequate natural nest sites exist (Nelson 1979a).
- 5) Discretion should be used when placing nesting platforms near sensitive wildlife sites (e.g., grouse leks, colonies of burrowing owls). Wildlife using such sites might fall prey to eagles and other raptors that nest on the platforms. For example, ground-nesting burrowing owls are preyed upon by larger diurnal raptors (Fitzner 1980a).
- 6) In most cases, it is prudent to locate platforms away from intensive human activity (e.g., away from roads and trails) (Stahlecker 1975, Baldridge 1977). The site should be free from chronic harassment. However, Nelson (1980a: 1) states that "It is obvious under current situations that . . . birds [raptors] will nest very close to human activity, from 50 to 250 yards, if the site has the proper prey base." Disturbance should be avoided, where possible.
- 7) Nest platforms may not be needed on all types of transmission towers, because the metal latticework of some steel towers and the double crossarms of H-frame wooden construction provide adequate nest substrates (Lee 1980, Steenhof et al. 1993).
- 8) More study is needed to evaluate the success and productivity of raptors using nest platforms on transmission structures. The success reported to date (e.g., Steenhof et al. 1993) is in part attributable to the fact that the platforms used by raptors were