

Indiana Biology Technical Note No. 2: Raptor Perch

Background. NRCS has recently experienced high mortality rates to tree and shrub seedlings on some of its restoration projects due to vole and mice damage. Raptors are birds of prey that are greatly beneficial in the control of rodents. While the impact of artificial perches on rodent population is not well documented, artificial perches make it easier for raptors to spot prey and allow them to use less energy when hunting. Installation of raptor perches may also help keep rodent populations low once they have been reduced through alternative techniques.

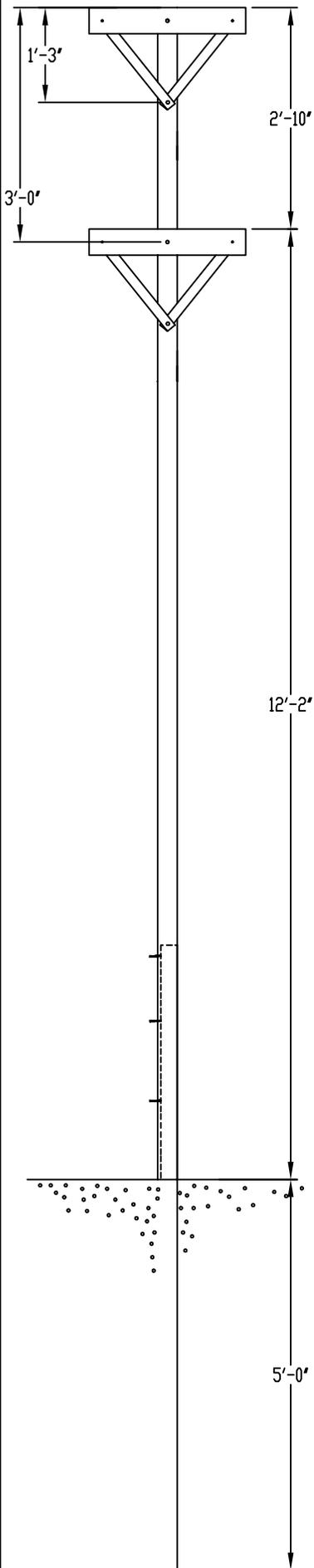
Artificial perches can improve the hunting efficiency of raptors, especially in areas where natural perches have been removed, by providing strategically located vantage points. Perches can be especially valuable in the winter and early spring before the primary rodent-breeding season. In Indiana, Barn Owls, Great Horned Owls, Short-eared Owls, Red-tailed and Red-shouldered Hawks, and American Kestrels may use artificial perches.

Important Points to Consider. Raptor Perches can be erected any time of year. They should be placed with their horizontal axis pointing east-west to avoid instability due to wind direction and changing visibility due to sun and moonlight. A spacing of at least 50 yards is recommended if more than one perch is planned.

When Raptor Perches will be installed near wetlands note that:

- Raptors will feed on herptiles (frogs, snakes, etc.) and small ducks
- Perches should be installed at least 300 feet from the wetland's edge

RAPTOR PERCH



MATERIALS

One 15' hollow metal pipe 3" diameter (ex: electrical conduit or galvanized steel pipe)
 Important: Use like metals for both pipe and support flats to prevent corrosion.

One 8' Fence post

2 - 2"x4" cross pieces 24" treated boards

4 - 1/8"x1 1/2"x16" metal support flats

3 - 2 1/2" x 3/8" bolts and nuts

4 - 2" x 3/8" bolts and nuts

2 - 3 1/2" bolts and nuts

2 - 5" bolts and nuts*

*A 6" inch bolt should be used on top cross piece at center if intending to attach a kestrel box to back of pipe.

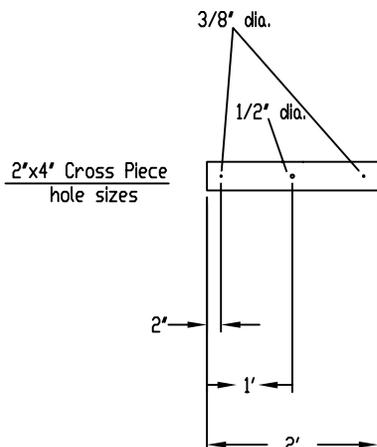
PREPARATION

Drill 1/2" holes in hollow metal pole, vertically aligned at 2', and 36" from top of pole through both front and back of pole. Pre-drill holes through front and back of pole at approximately 15' and 49' from top for securing metal support flats. See diagram at right.

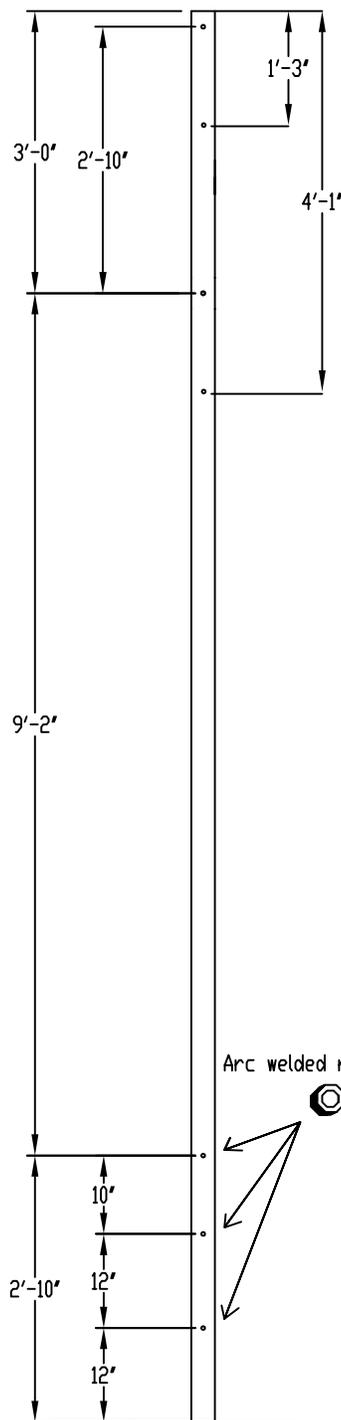
Pre-drill 1/2" diameter holes at 12", 24", and 34" from base of pole. Arc weld nuts matching 2 1/2"x3/8" bolts to outside of 3 base holes.

Pre-drill 1/2" holes in both 2"x4" cross pieces, at center. Pre-drill 3/8" holes at 2" from end on both pieces.

Tan/Brown rust prevention paint shall be applied to exposed metal surfaces.



1/2" Diameter Pre-drilled holes



Arc welded nuts

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INSTRUCTIONS:

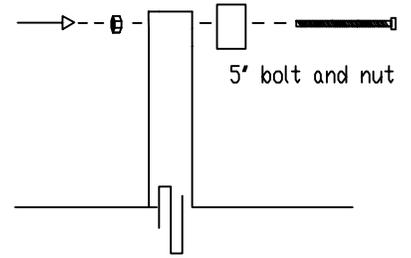
Step 3: Securing cross piece (side view)

Step 1: Complete all preparation steps.

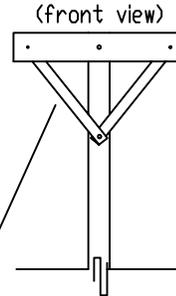
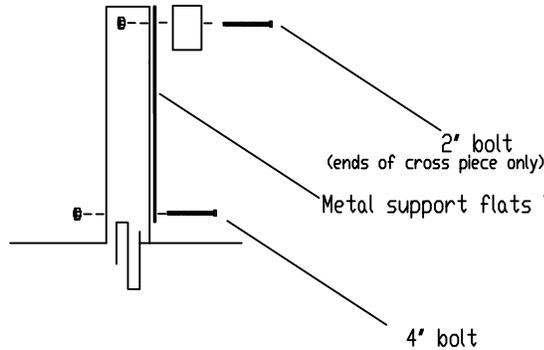
Step 2: Drive fence post 5' into ground at desired location.

Step 3: Taking the hollow metal pipe, loosely bolt cross pieces at holes, 2' and 36' from top. (5' bolts)

Step 4: Secure one end of support piece to the corresponding pre-drilled hole in the cross-piece. Secure other end to the front of the pole, using a 4' bolt. Repeat for the other side. Support pieces will overlap. Use bolts and nuts as shown. Repeat for both cross pieces and all supports.



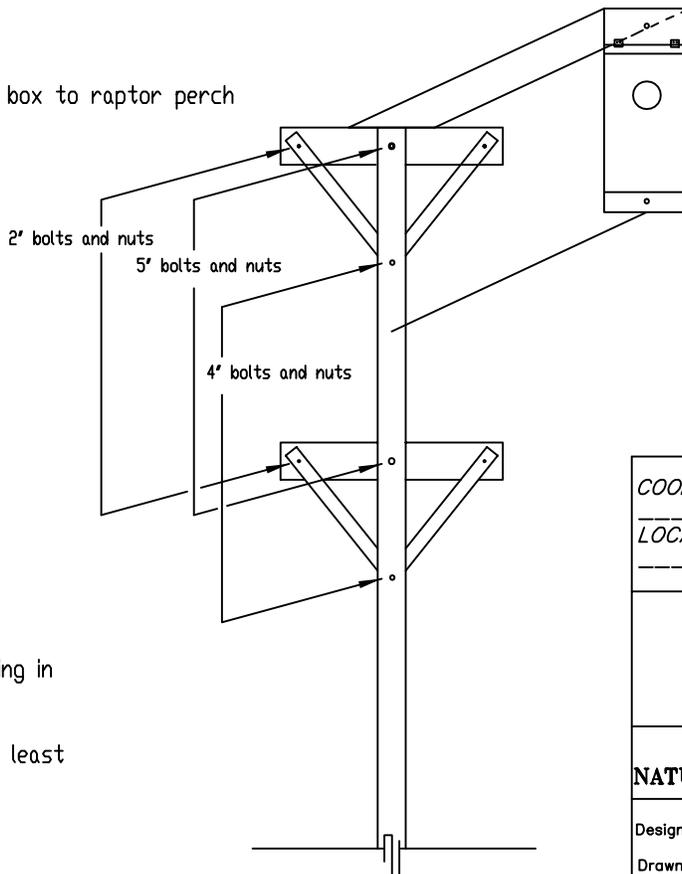
Step 4: Setting support flats (side view)



Step 5: Attach kestrel box to back of pole at one of the protruding bolts. Tighten all screws, then bolts. Bottom of kestrel box may be secured by wrapping rope/wire/cable around pole and through pre-drilled hole at base of box.

Step 6: Erect raptor perch by sliding pole over embedded fence post. Screw 2 1/2' bolts into nuts welded near base of pole and tighten.

Step 5: Attach kestrel box to raptor perch



SPECIAL INSTRUCTIONS:

Raptor perch shall be erected with axis running in the east and west directions, and multiple perches placed with at least 50 yard spacing.

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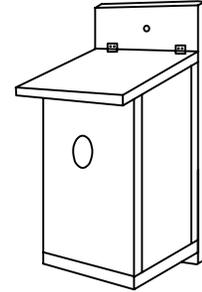
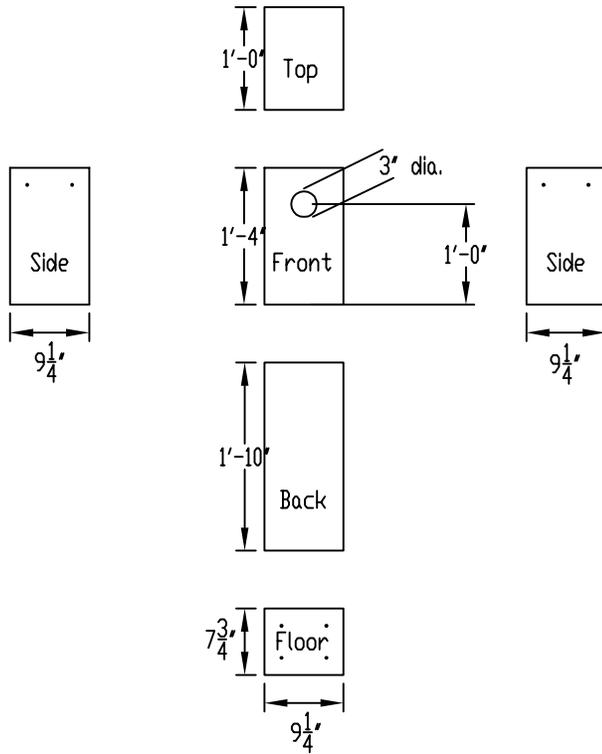
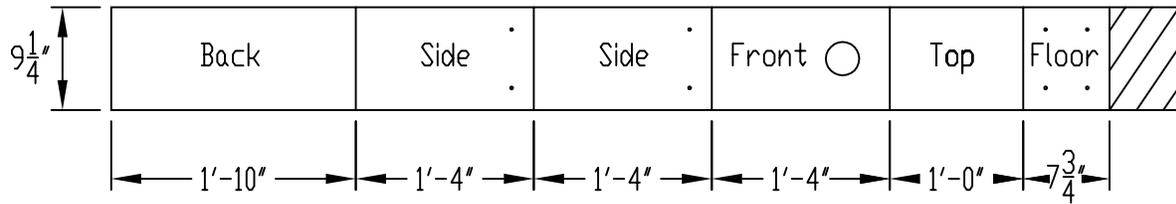
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KESTREL BOX *

(for attachment to Raptor Perch)

Lumber: One 1" x 10" x 8'0" Untreated Pine



MATERIALS

- One 1" x 10" x 8'0" Untreated Pine Board
- Pair of hinges
- 2 Small wood tacks
- 2' of wire
- Ring shank nails

ASSEMBLY:

1. Cut board to the appropriate dimensions, as given above.
2. Drill two 1/4" ventilation holes in both side sections and four holes in the floor section.
3. Assemble front, back, sides, and floor using ring shank nails.
4. Use hinges to attach top section. The wood tacks may be tacked to one edge of the top piece, leaving approximately 1/4" protruding. The other tack should be secured just below the first tack in the same manner, on the adjacent side. Wrap the wire around both tacks, wiring the lid closed.

SPECIAL INSTRUCTIONS:

Pre-drill 1/2" hole at 2" from top and 1/4" hole on back section below floor.

Once attached to the raptor perch, 3' of wood chips should be deposited in the bottom of the kestrel box.

Attach box with entrance hole facing east to south.

*Modified from "Woodworking for Wildlife"
Minnesota DNR, 1992

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