

The background features abstract, overlapping geometric shapes in various shades of green, ranging from light lime to dark forest green. The shapes are primarily triangles and polygons, creating a dynamic, layered effect. The central text is set against a white background that is partially framed by these green shapes.

Nest Box Proposal for the Laramie River Greenbelt Trail

By Benjamin Fleet

Why Nest Boxes?

- ▶ A recent study by the Cornell Lab of Ornithology, published in the journal *Science*, estimates that North America has lost 3 billion birds in the last 50 years (Rosenburg 2019)
- ▶ That is more than 1 in 4 birds lost in the last half century
- ▶ Nest boxes provide critical habitat for many secondary cavity-nesting birds
- ▶ Many species of birds will return to the area they were born in, increasing the number of birds returning to an area every year

Why Nest Boxes cont.

- ▶ Northern Flickers will still carve out their own cavities, which can be used by other cavity nesting species
- ▶ Bluebirds and Swallows both use nest boxes and are prolific insectivores, cutting down on pesky insects in the summer months
- ▶ They are cheap to make and easy to maintain, only needing cleaning a few times per year
- ▶ An increase in nesting native birds is an increase in biodiversity, beauty, and educational opportunity for Laramie

Existing Nest Boxes on the Greenbelt

- ▶ There are few existing bird nest boxes on the Greenbelt currently
- ▶ Of the ones found, most are older and low to the ground, making them good for only a few species, House Wrens, House Sparrows, and Chickadees
- ▶ House Sparrows are invasive and abundant in the Laramie area, and they take nesting opportunities and resources from native birds

Deterring House Sparrow Nesting

Many secondary cavity nesters are insectivores, and have very well adapted eyesight to catch insects in flight

- ▶ House Sparrows consume mainly seeds, and have poorer eyesight compared to that of the native cavity nesters
- ▶ Adding fishing line tightly attached to pins or nails around the entrance and roof of the nest box can help dissuade House Sparrows from using the box
- ▶ The fishing line adds an obstacle and a negative visual stimuli that the House Sparrows have trouble deciphering
- ▶ Though not 100% effective, even if a House Sparrow nests in a box, the nest can be removed



Target Species

- ▶ Northern Flicker
- ▶ Tree Swallow
- ▶ Mountain Bluebird



Abundance of Target Species at the Laramie River Greenbelt Trail

Mountain Bluebird



Last seen: 17 Jun 2021 by Diane Thomas

Tree Swallow



Last seen: 27 Aug 2021 by Diane Thomas

Northern Flicker



Last seen: 15 Jan 2022 by Robert Spaul

House Sparrow



Last seen: 16 Feb 2022 by Johnny Stutzman

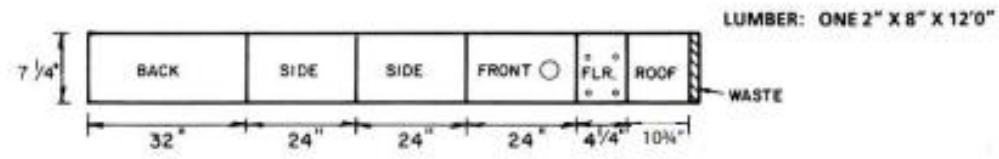
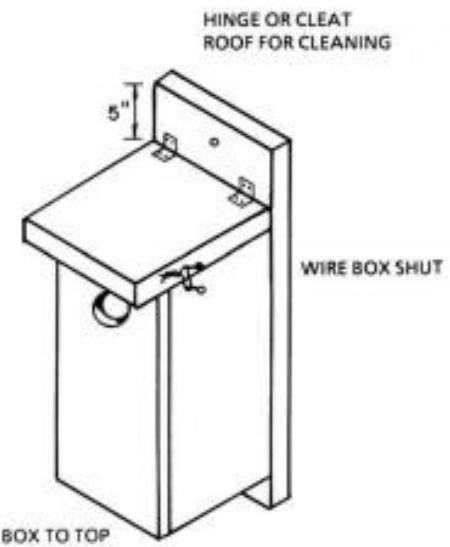
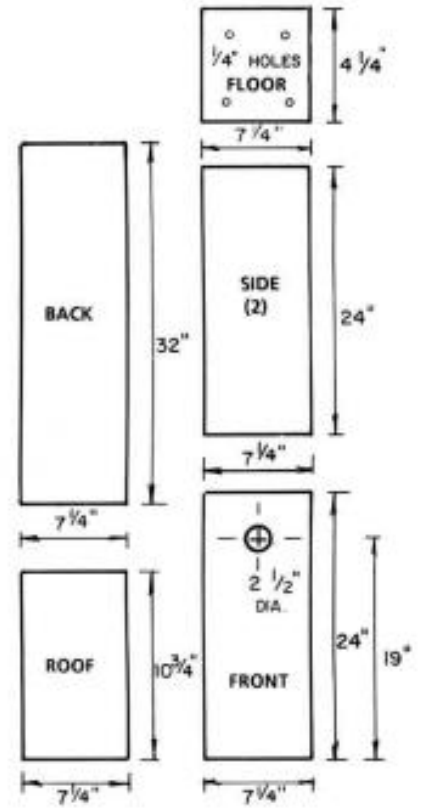
Illustrated Checklist
- Laramie River
Greenbelt Trail,
Albany County, WY,
US - eBird Hotspot
eBird.org

Nest Box Requirements: Northern Flicker

- ▶ Attach box to dead or live tree, pole, or post
- ▶ Place box at height of 6-12ft
- ▶ Face box South or East
- ▶ Nesting Season: May-July



Nest Box Plan for Northern Flicker



Nest Box Requirements: Tree Swallow

- ▶ Attach box to pole
- ▶ Place box at height of 5-6ft
- ▶ Face box South or East
- ▶ Nesting Season: *Mid-May to Mid-July*



Nest Box Requirements: Mountain Bluebird

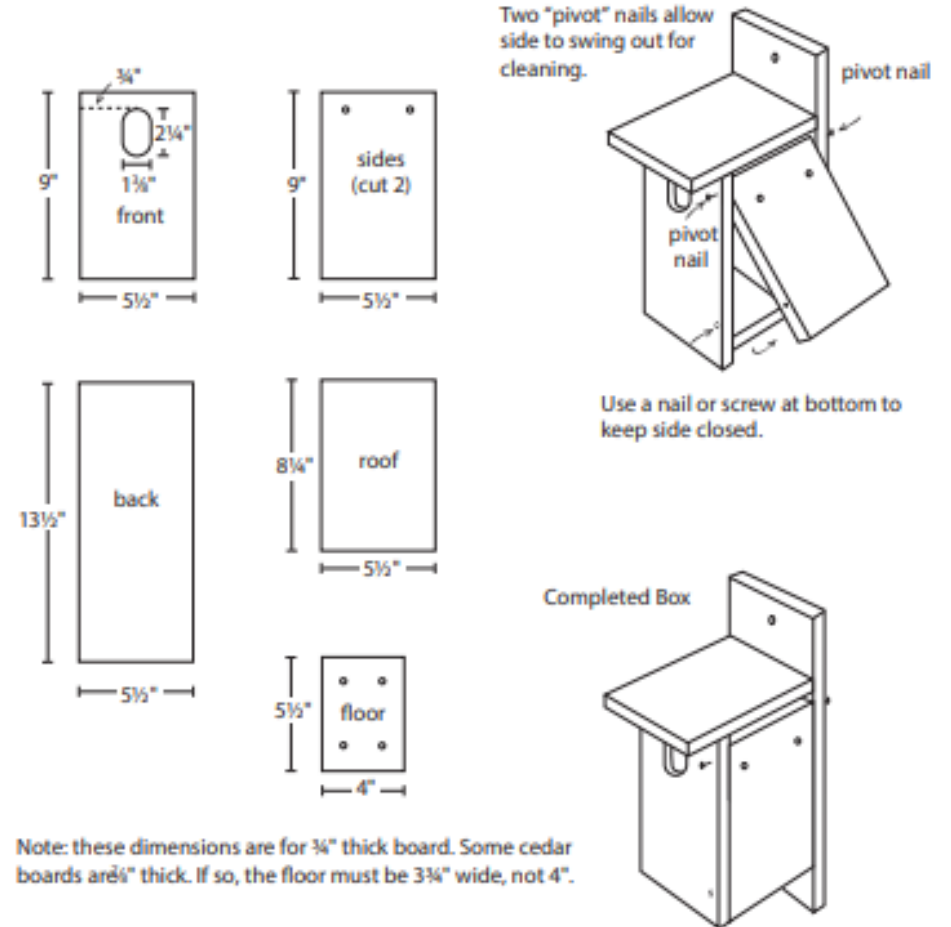
- ▶ Attach box to pole
- ▶ Place box at height of 4-6ft
- ▶ Face box East
- ▶ Nesting Season: April-August



Nest Box

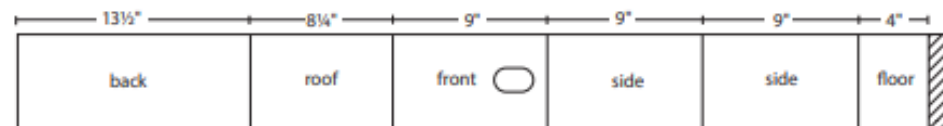
Eastern, Western, and Mountain Bluebirds;
Tree and Violet-green Swallows

Note: Western Bluebirds need a $1\frac{1}{2}$ " diameter round entrance hole and Mountain Bluebirds need a $1\frac{3}{16}$ " diameter round entrance hole. Swallows are smaller than bluebirds and will be able to enter holes $1\frac{3}{16}$ " or larger.



Note: these dimensions are for $\frac{3}{4}$ " thick board. Some cedar boards are $\frac{5}{8}$ " thick. If so, the floor must be $3\frac{3}{4}$ " wide, not 4".

Lumber: 1" x 6" x 6'



Possible Locations for Nest Boxes: Northern Flicker (41.3037602, -105.6031602)



Mountain Bluebird

(41.3099107, -105.6065264)



Tree Swallow

(41.2999906, -105.6081427)



Sources

- ▶ [NestWatch | NestWatch - Where Birds Come to Life](#)
- ▶ eBird by The Cornell Lab of Ornithology ([Illustrated Checklist - Laramie River Greenbelt Trail, Albany County, WY, US - eBird Hotspot](#))
- ▶ Rosenberg, Kenneth V., et al. "Decline of the North American avifauna." *Science* 366.6461 (2019): 120-124.