



How to make a  
**Bird House**

Saving the birds by building a sustainable, usable, long lasting habitat that protects birds from predators and other factors.

**INSPIRED VERSION**

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Made by James Villemarette for ENGL 410, due April 9th, 2021 for the Spring 2021 semester. All images were generated in Blender 3D & Adobe Illustrator for this assignment. No third party assets were used in the making of these instructional guide. This version is inspired by the Miele Operating Instructions found on ManualsLib dot com. All information comes from the Audubon Society website.

# TABLE OF CONTENTS

The following list is all of the major steps that are required to build a successful bird house.

section	subheading	page
a.	Introduction	2
b.	Gather the Materials	3
I.	Cut the Wood	4
II.	Sand the Wood	5
III.	Drill Screws	6
IV.	Find a Mounting Point	9
V.	Mount the Bird House	10
VI.	Secure the Site Against Predators	11
VII.	Conclusion	13

## a. INTRODUCTION

Birds are critical pollinators, insect predators, and serve a wide variety of vital ecosystem functions. By building a bird house you can help improve the health of your local ecosystem.

**WARNING! →** This guide requires dangerous tools, such as a wood saw, that should be handled carefully. Seek help from a professional if needed.

## b. GATHER THE MATERIALS

You will need the following **materials**:

- 1 > 8 sq. ft. of untreated, wooden panels,
  - Preferably cedar, pine, or cypress.
- 2 > 8 Philips-head, galvanized drive screws.
- 3 A Predator Guard,
  - > 2 sq. ft. of wire mesh.
  - Stovepipe.
  - A collar.
- 4 1x4 wooden segment, about 1 ft. long.

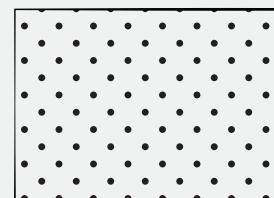
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You will also need the following **tools**:

- 1 Wood Saw



- 2 Sand Paper or Sander



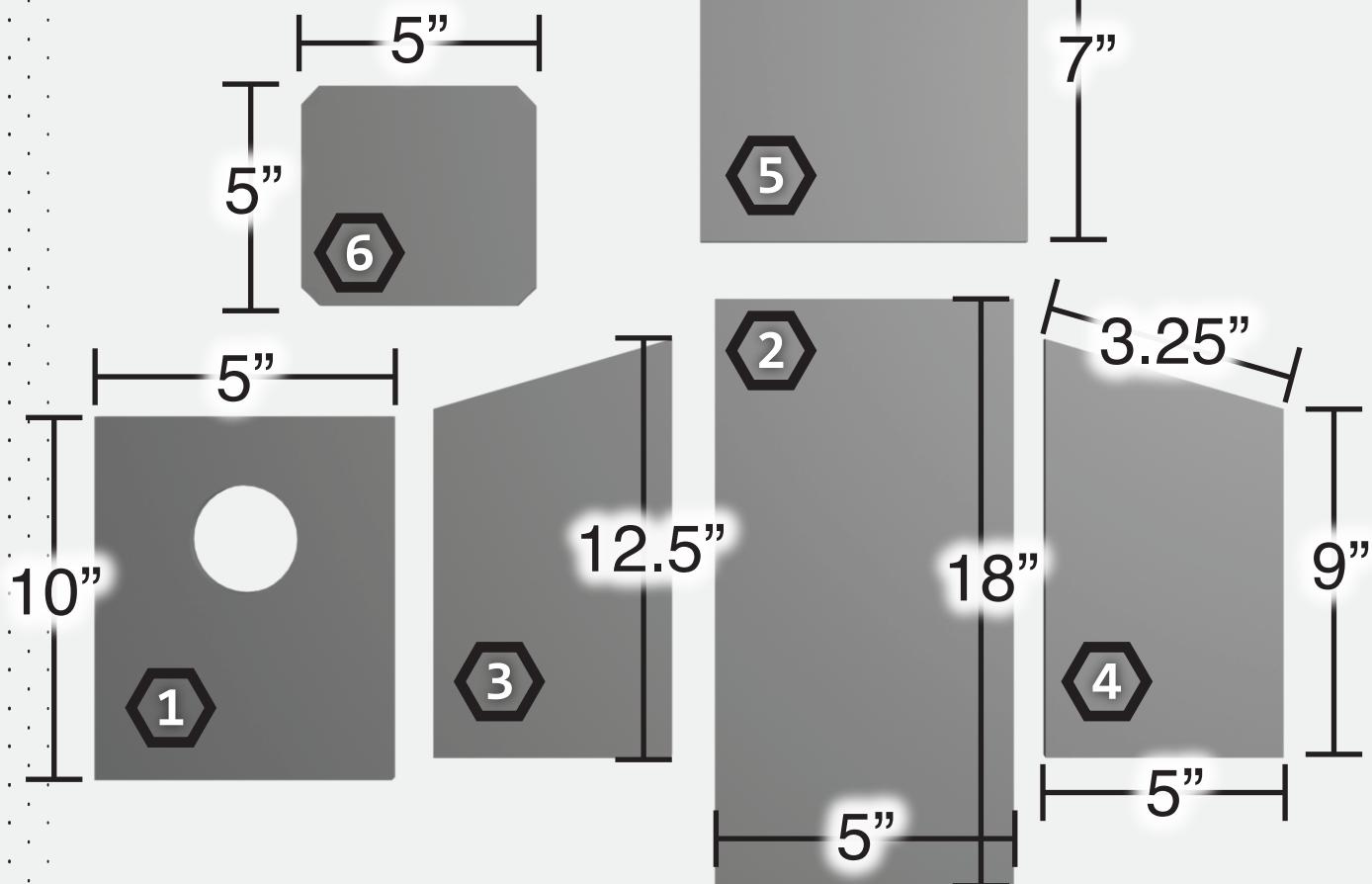
- 3 Screw Driver



# i. CUT THE WOOD

The dimensions listed here are highly recommended, but can be changed depending on the amount of wood you have, and the environment that you are in.

Use your  
**1** Wood saw



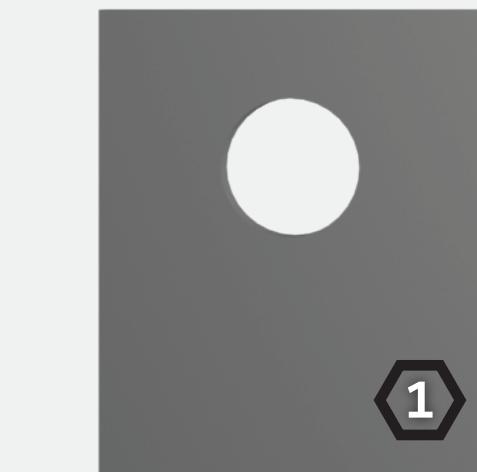
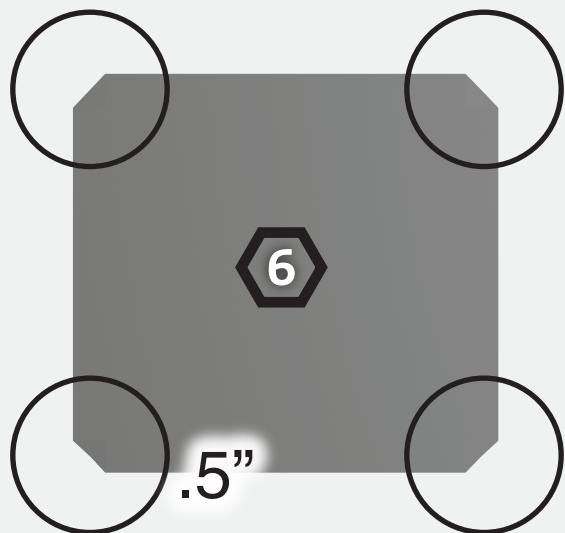
- 1** Front
- 2** Back
- 3** Left side

- 4** Right side
- 5** Roof
- 6** Bottom

## ii. SAND THE WOOD

Use your **2 sand paper or sander** to. It's important that all the burrs, splinters, and rough edges be sanded down to avoid any risk or injury to the birds.

On the inside of the **1 front panel**, you should sand in groves in the wood. This helps chicks climb out of the bird house.



For the **6 bottom panel**, you should use your **1 wood saw** and **2 sander** to cut .5" into the corners. This helps make drain holes to prevent any rain accumulation on the inside.

### iii. DRILL SCREWS

To put the bird house together, you need to secure it with **2 galvanized drive screws**.

13x



These type of screws are flanged at the top, which helps tighten the screw hole, and prevent rain water from entering into the hole. They slow down wood rot, and hold the bird house together for decades.

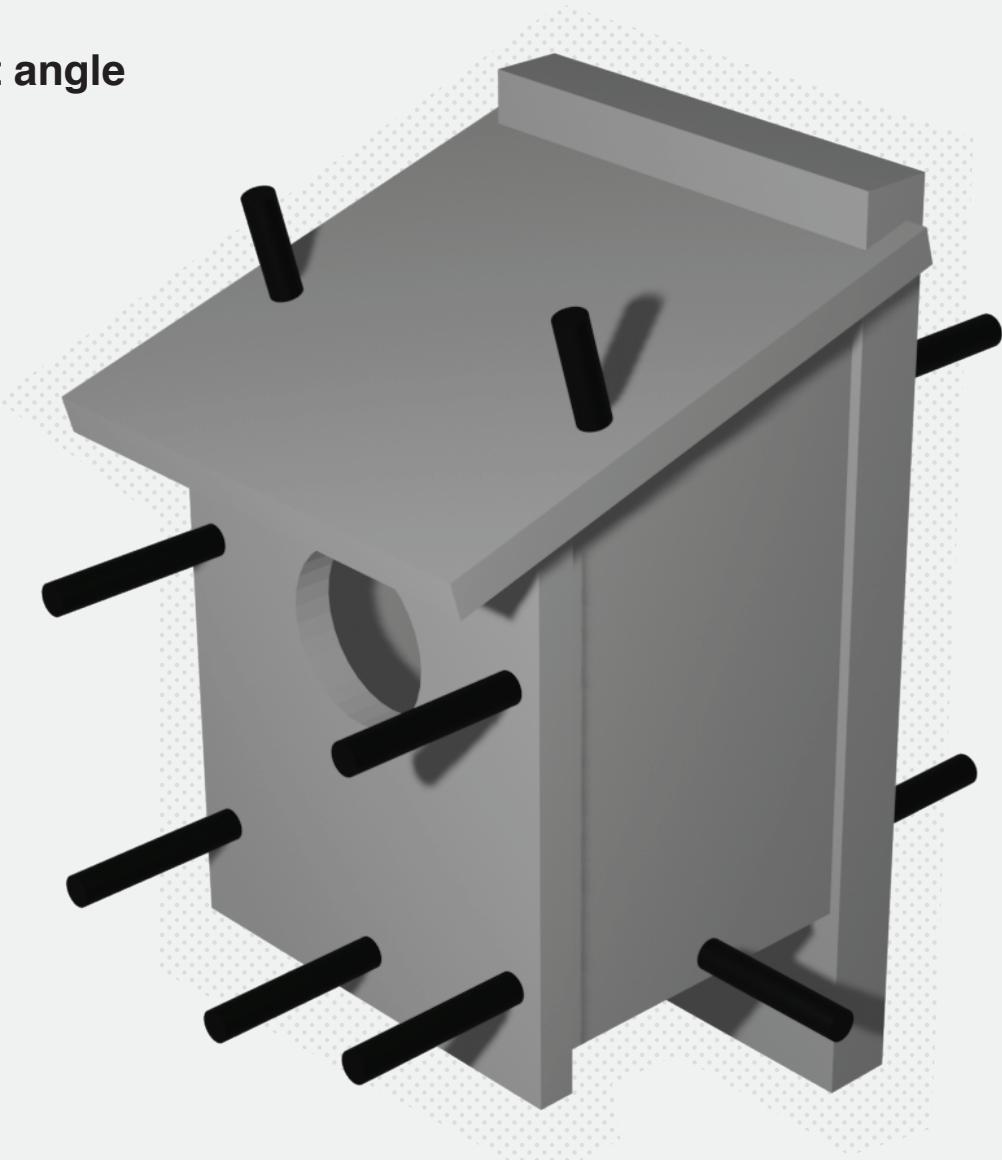
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Drill the screws in with a **3 screw driver** into the specified locations:

- The four corners of the **1 front plate**.
- The bottom middle of the **1 front plate** (to support the **6 bottom plate**.)
- The bottom middle of the **3 left side**.
- The bottom middle of the **4 right side**.
- The top middle of the **5 roof**.
- The four corners of the **2 back plate**.

Diagrams are on the next two pages.

**FRONT at angle**



The black pegs represent where the screws go.

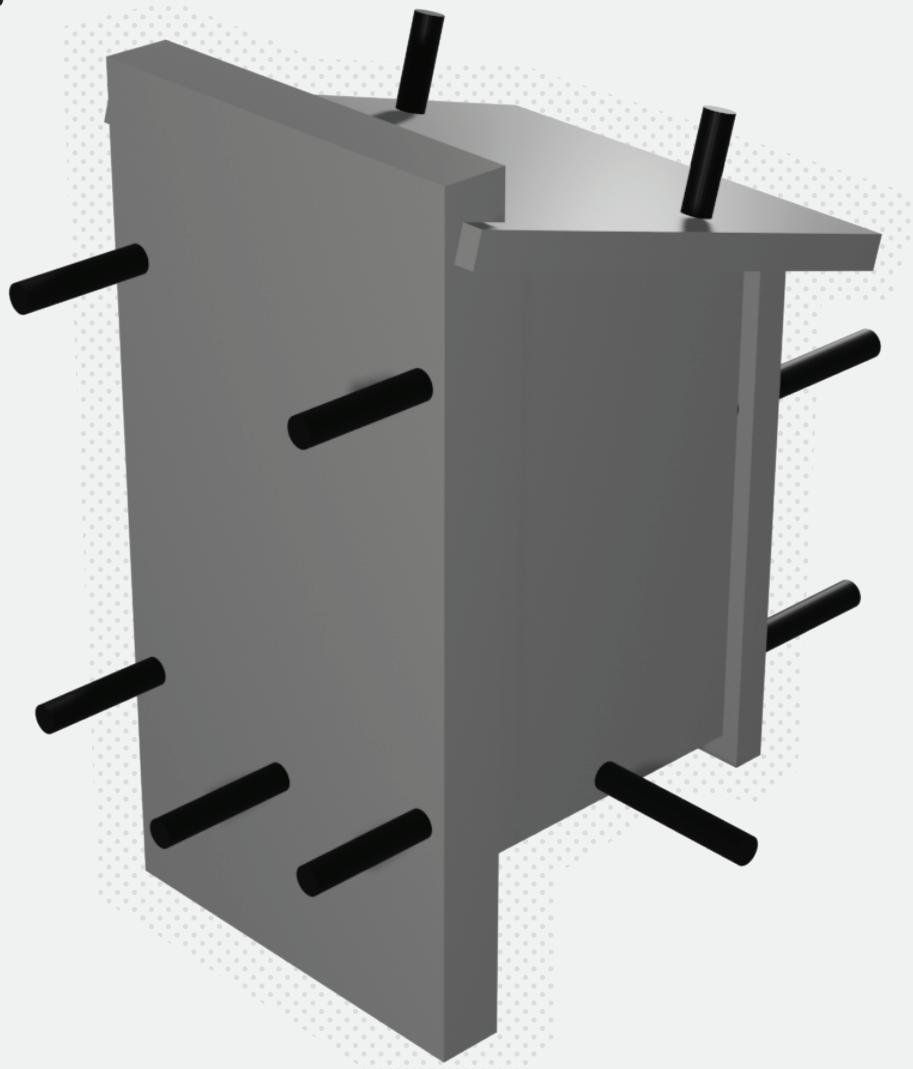
**Note:**

These screw positions help ensure the longevity of the bird house.

You can drill more screws in, but be careful to not drill a screw into another overlapping screw.

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## **BACK at angle**



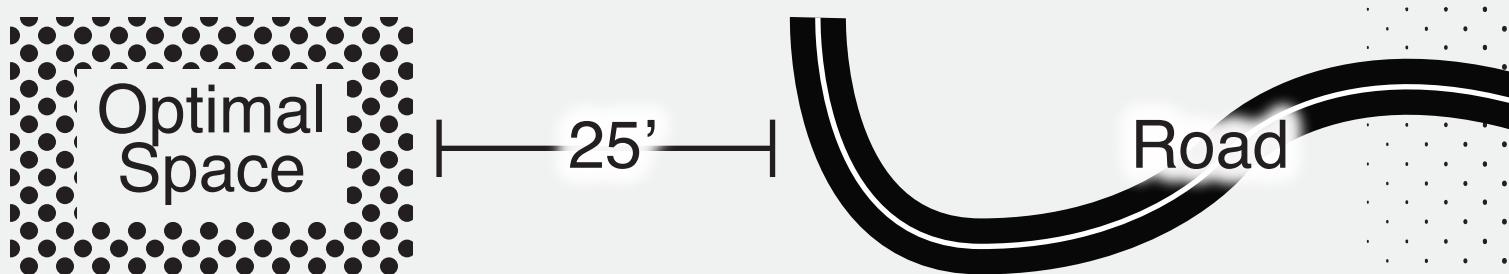
### **Note:**

It is best to drill the screws in the order that was specified on page 6. Though it may be difficult to hold the plates together to drill, the order of drilling and positions of the screw ensure that there are no screw heads or bits the are inside the bird house interior. Any metal poking inside the bird house could harm the birds and young.

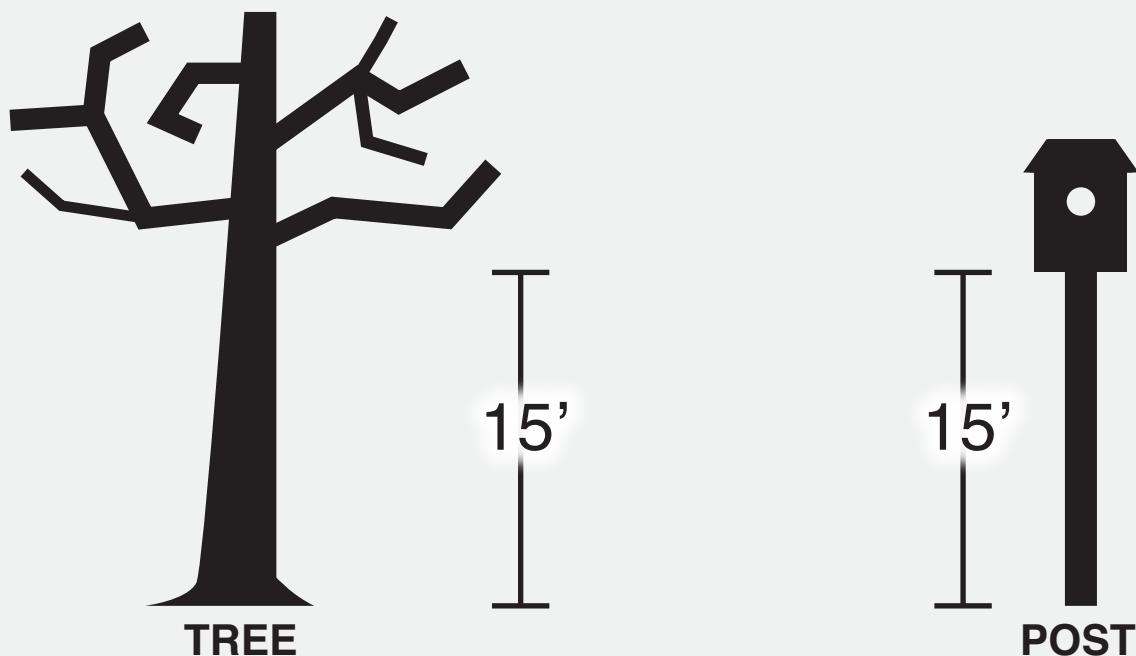
#### iv. FIND A MOUNTING POINT

There are many factors to consider of where you should put your newly constructed bird house.

**Isolated:** The bird house should be placed away from areas of human activity. At a forest edge, away from sidewalks, roads, or other pedestrian pathways are all good choices.



**Height:** The bird house should be at least 15 feet off the ground. This helps prevent predators and nefarious persons from disturbing the habitat.



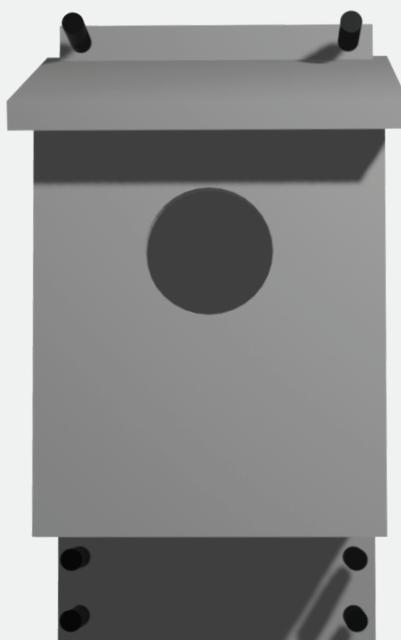
## v. MOUNT THE BIRD HOUSE

Once you have decided where to put your bird house, it is then time to mount it.

6x



You will need more **2 galvanized screws**. Two should be drilled in the top, and four screws should be drilled in the bottom to ensure good structural support. The reason why there's more screws in the bottom is because wood lasts longer under a mix of compression and tension.



FRONT



FRONT at angle

Ensure that you are mounting the bird house on a flat enough surface.

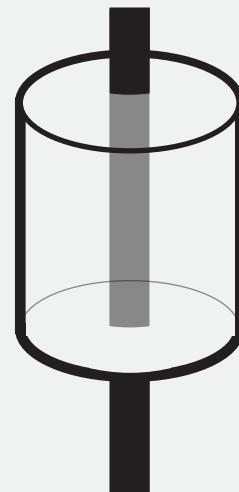
## **vi. SECURE THE SITE AGAINST PRED.**

Birds have several natural predators. While having biological competition is beneficial to maintaining a balance, or homeostasis, in an ecosystem, birds need a place to raise their chicks in order for this ecosystem to be maintained.

You can use the following devices to keep predators out of your birdhouse:

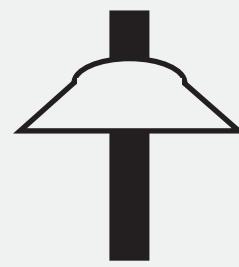
### **Noel Guard**

A wire mesh tube that goes around entrance. It is only so effective, and should be used in combination with one of the below.



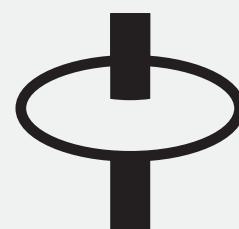
### **Stovepipe**

24-36" long, 8" diameter, stops preds. effectively.



### **Collar**

A shortened stovepipe, somewhat less effective.



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**Noel Guards** are the most effective method of keeping out predators. But they are also the most expensive option, relative to the others listed below. In more urban or suburban environments, it may not be necessary to use this device when few or no predators are spotted.

**Stovepipes** are one of the most options selected for bird house predator protection. They are considered the “middle option” in terms of cost and effectiveness. And they tend to work in most environmental situations.

**Collars** are the cheapest and least effective options. Though, they can stop many naive or young predators, they offer minimal protection. However, if it is not easy to fabricate a noel guard or stovepipe, or they are not easily available, the collar is better than nothing.

**It's important to note** that not all bird houses require a predator guard. If it is mounted high on a flat wall, or any other logical places, then they may not be required.

## **vii. CONCLUSION**

Thank you for following along with this guide. You are helping maintaining your ecosystem, and providing yourself an awesome opportunity to see some amazing birds, up close.

If you would like to, there's multiple ways that you could improve your birdhouse.

### **Varnish**

My painting your bird house with a wood varnish, you can greatly inhibit wood rot, and extend the life of the bird house.

### **Video Camera**

An old laptop webcam with a lengthed USB cable can easily allow you to watch your bird house visitors without disturbing the nest. And recording observations to submit to the Cornell Ornithology health can help track species growth over time.

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Other ways that you could improve your bird house include:

## **Heater**

A small USB or battery powered heating pad can improve the birds' health during the frigid winter months. Depending on your climate.

## **Decorations**

Flowers, tree branches, or some earth-tone paints can help make a bird house stand out to travelling or local birds to use.

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In conclusion, we hope that you enjoy your new bird house, and any visitors that may wish to take residence in it.