Design Challenge: Helping Our Friends, the Wrens

Overview

There are a number of small birds that used to live in our meadows, marshes, and forests. Now that we have built our homes and communities in their former habitats, we need to enjoy those small birds to return and live amongst us. Small birds, like the House Wren (http://www.birdvancouver.com/b_house_wren.html), are valuable friends. They help control the spread of weeds by eating the seeds and they maintain a balance of nature by eating pests such as bugs, worms and mosquitos.

Small birds like the House Wren need our help. They are losing their natural habitats. Many of the pesticides we have used on our crops and gardens have threatened the lives of Wrens, and our urban development has forced them to live further away from us.

Design Rationale

Wren houses can be constructed to support and encourage Wrens, and other small birds, to return in our neighbourhoods. Wrens need access to water and food. The houses we build to attract them can be installed any time of the year but when the Wrens are preparing for nesting is probably the best time to introduce a Wren house. Wrens are not too picky about homes but the size of the entrance and protection from predators such as neighborhood cats is important.

For suggestions on the actual construction of the optimal bat house, please check out the resource Interactive Workbook – Bird House, which is available from www. theelementarywoodshop.ca. This workshop offers design tips, lessons, patterns and various support materials. Other references are available from sites such as the National Wildlife Federation (https://www.nwf.org/News-and-Magazines/National-Wildlife/Birds/Archives/2010/Winter-roosts-for-birds.aspx).

Problem Scenario

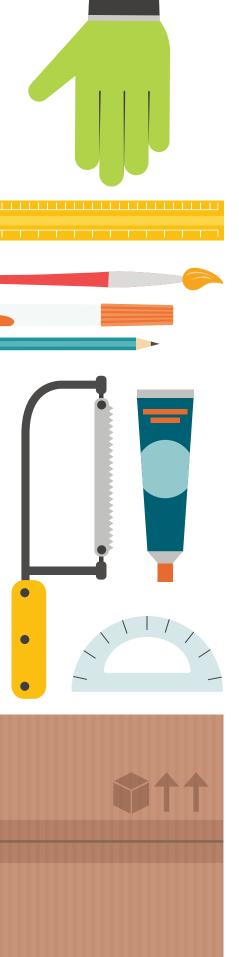
Your team has been selected to design an attractive Wren house that will attract Wrens or other small birds to our neighbourhood. Your Wren house design should reflect our community and environment. It should meet and / or exceed the key criteria for successful Wren nesting areas. Your team will build a prototype from your final Wren house design sketch using cardboard and the materials provided by your teacher. Successful prototypes will be selected for construction using durable materials.

Success Determinants

Success will be determined by:

- ☐ Meets the key criteria for a successful Wren house
- Is attractive
- □ Reflects our community
- ☐ Can ultimately be built using more durable materials (i.e., wood)





Parameters

- ☐ Use items and materials found in your Participant Group Kits and the *Shared Pantry*.
- ☐ Use the tools that have been provided at the *Shared Tool Station*.

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