May 2014

AgriLife Extension Solutions

Repairing 3-D Decoys for Hunter Education

Denise Harmel-Garza
Extension Associate
Texas A&M AgriLife Extension

Keith Andrew Howerton
Eagle Scout, Troop 102
Arrowmoon District, B.S.A.

Audrey Sepulveda
Student Technician
Texas A&M Agricultural Science

Introduction

Using three dimensional (3-D) decoys in training exercises can be an exciting part of any hunter education experience. They are a valuable tool for an instructor, used to discuss shot placement, wildlife identification, and safe shots. However, cost can limit their use as 3-D decoys can be expensive. New decoys can range in price from $300 to $800, especially for big game species. Decoys with slight imperfections, called seconds, can be bought significantly cheaper but may be hard to find. Another alternative to buying new or 'second' decoys is to refurbish or repair used ones. You may be able to find used decoys from archery clubs. This fact sheet explains how to make minor repairs and repaint 3-D decoys to rejuvenate and extend their use. It does not describe how to replace an entire target area of a decoy. If the entire target area of a decoy needs to be replaced, you can buy the replacement parts from the same company that made the decoy.

Materials Needed

- Expanding foam insulation
- Hack saw blade
- Wood or drywall screws
- Rasp
- Glue
- Mask
- Gloves
- Plastic drop cloth
- Phillips screw driver
- Grit sand paper (any grit)
- 1 gallon exterior outdoor grade latex primer
- 1 gallon exterior/indoor latex paint

AgriLife Extension Solutions

Repair How-To

The decoys we repaired were over 18 years old; they had holes in them from being shot with arrows (Fig. 1). They were missing pieces (Fig. 2) and all the paint flaked off exposing the brittle foam underneath. To begin the repair, holes were filled with expanding foam insulation (Fig. 3).

Figure 1 - Old damaged 3-D decoy

Figure 2 - Missing parts are reattached with glue and wood screws.

The foam was allowed to dry and the excess was cut off with a hack saw blade then sanded flush with a rasp. Body parts, such as ears, were reattached using glue and long wood screws. Liberal amounts of glue were used in between the parts and the wood screws were inserted into strategic places to help hold the pieces together. Screws were drilled slightly below the decoy's surface and were left in place. Once the screw head went below the surface, the foam usually closed up around it and the screw was not visible. After the decoy was repaired it was given a light sanding and was wiped clean with a rag.

Figure 3 - Spray foam insulation was used to fill holes.

Exterior outdoor grade latex primer was used to paint the decoys. Some decoys only needed two coats of primer, while others required three (Fig. 4). The decoy was then painted with exterior indoor/outdoor grade latex paint that was color-matched with the original decoy color (Fig. 5). A coat of paint was applied, allowed to dry, and then followed by a second coat. Even though the paint was dry it remained tacky until cured. The latex paint took approximately 3 days to cure. If the decoy came in contact with another surface before it was cured, the paint

would stick and peel off the decoy. We made a stand using 2x4s with holes drilled into it to hold the decoys, while they were painted (Fig. 6). The rack also allowed for the decoy to cure without touching anything. Once the paint cured, it was very durable. We have been using one of the repaired decoys now for 3 years and it is holding up remarkably well.

Figure 4 - Several coats of interior/exterior latex primer were painted on the decoys.

Summary

We repaired 18 decoys at an approximate cost of $225 or $12.50/decoy with this process. The cost included paint, primer, sand paper, brushes, expanding foam, and 2x4s. The cost of labor and equipment was not included. A Boy Scout made decoy repair his Eagle Scout project. The low cost and ease of repairing old used decoys makes their use in a hunter skills trail an affordable option, and there is a notable change in the decoy quality (Fig. 7-8). These 3-D decoys will increase the effectiveness of any presentation made in a hunter education classroom or on a hunter skills trail.

Figure 5 - Interior/exterior latex paint was color matched to original decoy color.

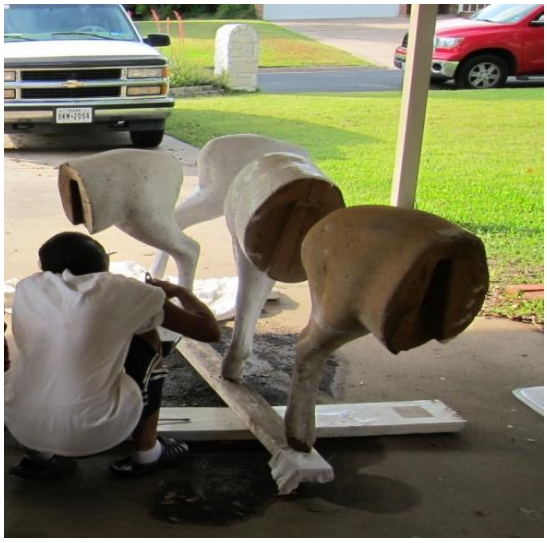

Figure 6 - A rack was made to hold the decoys while they cured.

Figure 7 - Before

Figure 8 - After

Acknowledgement and Disclaimer

This publication was developed as part of the Hunter Education Initiative, with funding support from the Wildlife Restoration Funds grant administered by the Texas Parks and Wildlife Department. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the Wildlife Restoration Program or Texas Parks and Wildlife.

Produced by Texas A&M AgriLife Communications
Extension publications can be found on the Web at http://AgriLifeBookstore.org
Visit Texas AgriLife Extension at http://AgriLifeExtension.tamu.edu