2. Circle the densest portion of the pattern using the patterning circle.

3. Count all the pellets within the 30 inch circle.

4. Average the counts for all three targets.

5. Make needed adjustments and enjoy your hunt!
As hunters we strive to ensure that animals are taken as quickly and humanely as possible, that the resources that we enjoy are used as wisely as possible, and that our actions help ensure that hunting is a long-lived tradition. A bird hunting issue that receives considerable attention is wounding loss. Wounding loss is defined by the number or percentage of animals that are shot but not retrieved. In bird hunting, this includes birds that are shot and cannot be found and birds that are hit and fly away. Either way, the end result is a dead or injured bird that does not make it to the hunter’s bag.

Wounding loss is not just a recent concern. Studies from the 1930s (long before the implementation of non-toxic shot restrictions) to date have found that a minimum of 25 percent of ducks and geese that are killed are not retrieved. This means that one out of every four waterfowl that is hit is not retrieved. Additionally, research has also shown that virtually no birds (less than 3 percent) survive the injuries sustained, and most quickly succumb to predators.

WHAT IS THE SCOPE OF THE ISSUE?
Using the conservative estimate of a 25 percent wounding loss for ducks and geese, approximately 3.5 million waterfowl are lost in the U.S. and Canada each year to wounding loss. Additionally, research has shown a 30 percent loss for dove, which equates to over 6 million dove being wounded and lost annually in the U.S.

Causes of wounding loss:
• Poor shooting skills
• Shooting beyond the maximum effective distance of the equipment
• Shooting into flocks
• Shooting at the lead bird in a flock
• Taking going-away shots at birds over 30 yards
• More than two hunters shooting at a time
• Not immediately going to pick up downed birds
• Not using a trained retriever

Ways to reduce wounding loss:
• Practice shotgunning year round
• Only shoot at birds that are within range for your shooting ability
• Use the correct load and choke combination
• Pattern test your gun, load and choke combination
• Isolate birds on the edge and rear of flocks
• Immediately pick up downed birds
• Do not shoot another bird while retrieving a bird
• Do not hunt in areas where you are likely not going to be able find a downed bird
• Use a trained retriever

PATTERN TESTING
Pattern testing is a useful tool to determine the appropriateness of a unique load and choke combination for a specific hunting scenario. For example, if you typically hunt large ducks over decoys it is vital to know if the load and choke combination that you are using will produce a pattern that consistently results in a clean kill.

It is important to note that pattern testing does not paint a complete picture of the pattern. The test will show the pellet density and string width, but not the string length. Shot string lengths vary depending on the type of material used and size of shot, but most steel shot strings are 8-12 feet long. Thus, a flying bird is only exposed to a portion of the shot string.

Items needed to pattern test:
• 4’ X 4’ piece of ¼” plywood
• 2 - t-posts
• t-post driver
• 48” X 48” sheets of paper
• 4 - large binder clips
• 30” clear patterning circle (plexiglass is inexpensive and works well) or pencil attached to 15” string
• Object to denote distance (cone, post, etc.)
• Wire to attach plywood to t-post
• Box cutter or knife
• Marker
• Rangefinder or tape measure
• Safety glasses
• Hearing protection
• Texas Waterfowl Digest (available where you buy a hunting license)

How to pattern test:
Begin by assembling the patterning board. The t-post holds the plywood and the paper spans the width and length of the plywood, fastened to the board using the binder clips. Using a rangefinder or tape measure, measure the desired distance (i.e., 20, 30 or 40 yards) from the board and mark using a cone or other object. From your selected distance fire one shot at the center of the paper. Approach the target and using the patterning circle, draw a circle around the densest portion of the pattern (no matter where it is on the paper), attempting to get as many pellets as possible contained within the circle. Once the circle has been drawn count each pellet strike and mark each one as you are counting. Replace the target with a new piece of paper and repeat two more times. Next, average the pattern count for the three targets. You now know the average number of pellets that your gun/load/choke combination will produce at that distance. Lastly, refer to Tom Roster’s Nontoxic Shot Lethality Table® in the Texas Waterfowl Digest. Find the activity that you plan to participate in and then find the column that denotes the minimum pattern count needed for a clean kill. If your current combination meets these minimums then you are amply prepared for that scenario. If it does not, then you may need to change the choke, change the size of the shot being used, and/or decrease the distance. Continue experimenting until you have a combination that meets your needs. Remember that if you change your activity (size of bird or expected distance of shot) you need to refer to the table to make sure that the pattern count meets the minimum needed.

1. Shoot one shot at the measured distance.