Wildlife Management Activities on the Oak Ridge Reservation (ORR)

photo by Polly Leinius

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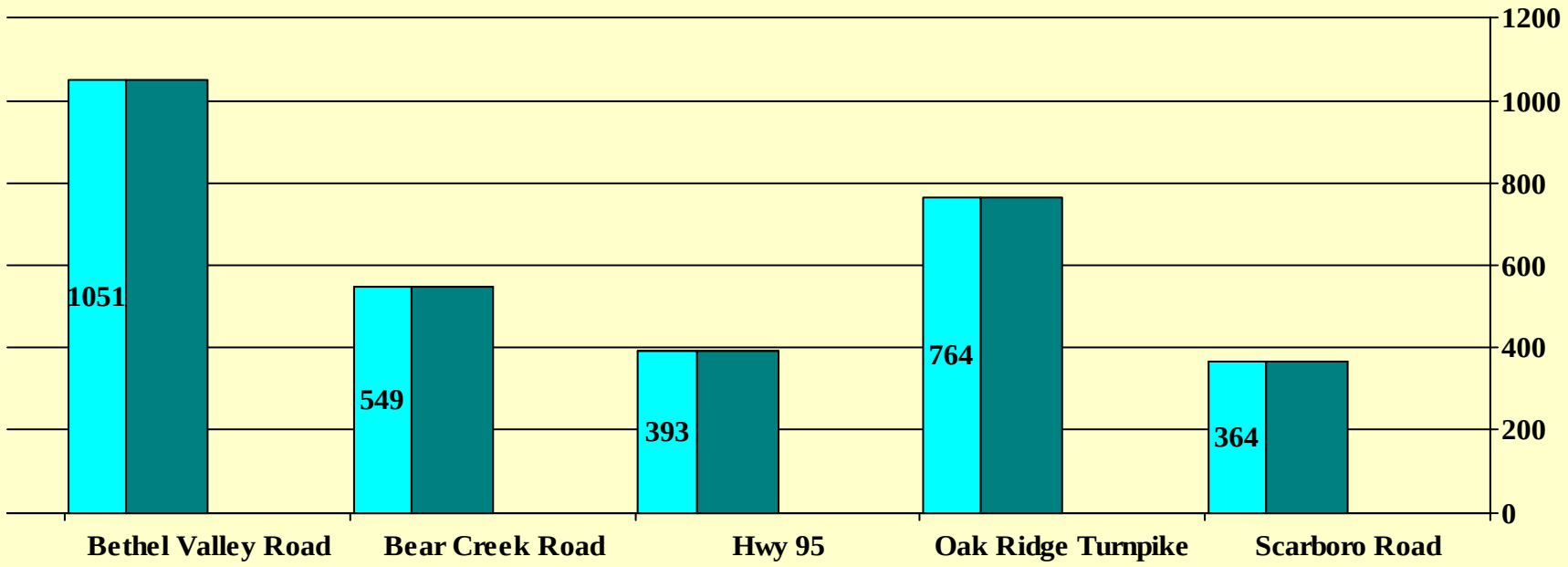
ORR Wildlife Management Coordinator
September 2006

White-tailed Deer Hunt

Deer-Vehicle Collisions on the ORR by Road (1975 – 2005)

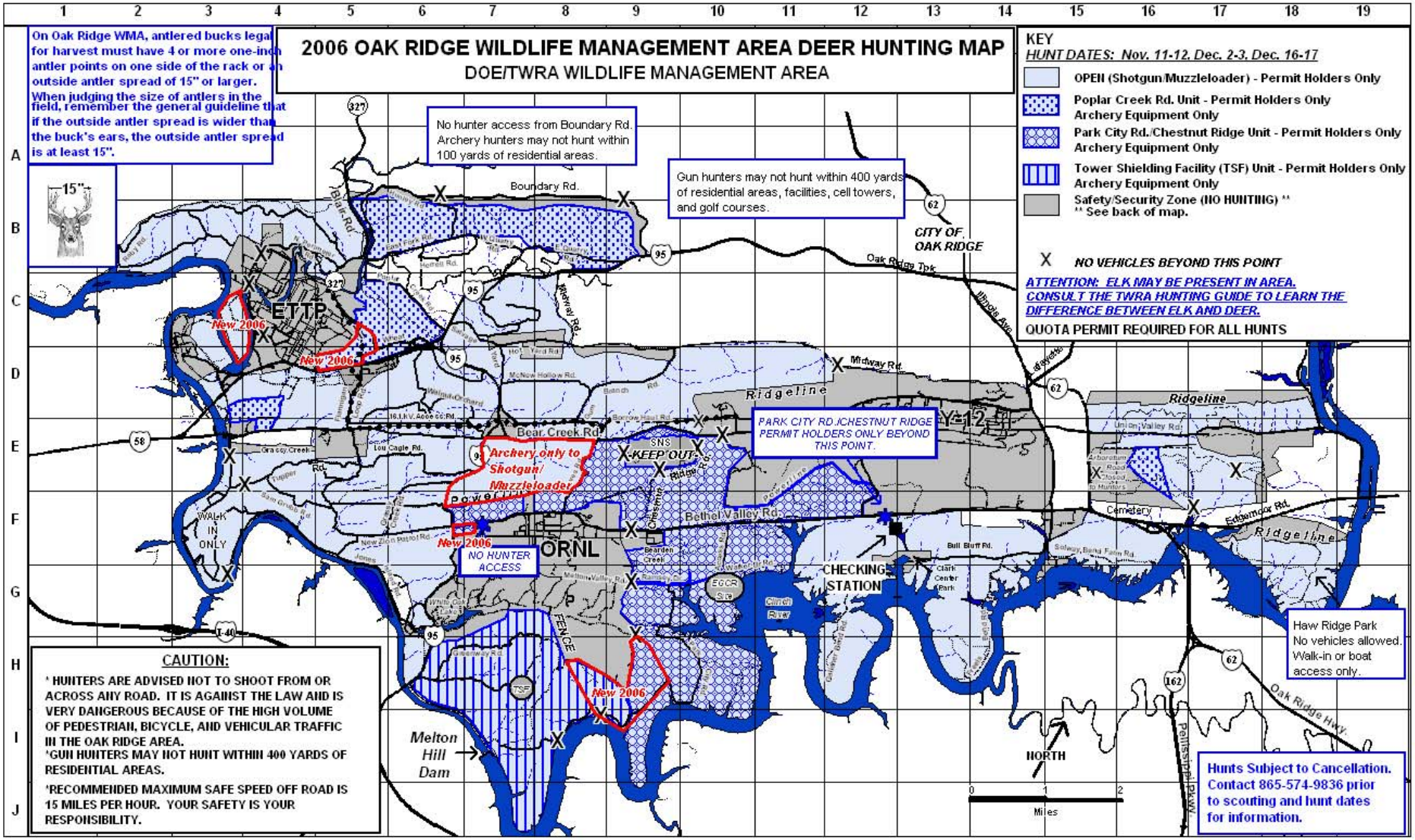


Hunts on the ORR, 1985-present

Bucks	**5154**	**55.9%**
Does	**4061**	**44.1%**
Total	**9215**	
Retained	**183; 1.99%**	
Heaviest	**218lbs, 1998**	
Most points	**22**	
Avg. Weight	**85.6 Lbs.**	
Eldest	**12 years**	
Avg. age	**1.9 years**	

Deer Hunt Changes for the 2006 Season

- Hunting Acreage
  - Converted approximately 300 acres from archery to shotgun/muzzleloader.
  - Converted approximately 75 acres from no hunting to shotgun/muzzleloader.
  - Converted approximately 150 acres from no hunting to archery.
- Allowable Take
  - Increased archery take to 3 deer (no more than one antlered).
- Number of Hunters
  - Increased number of hunters for archery hunts.

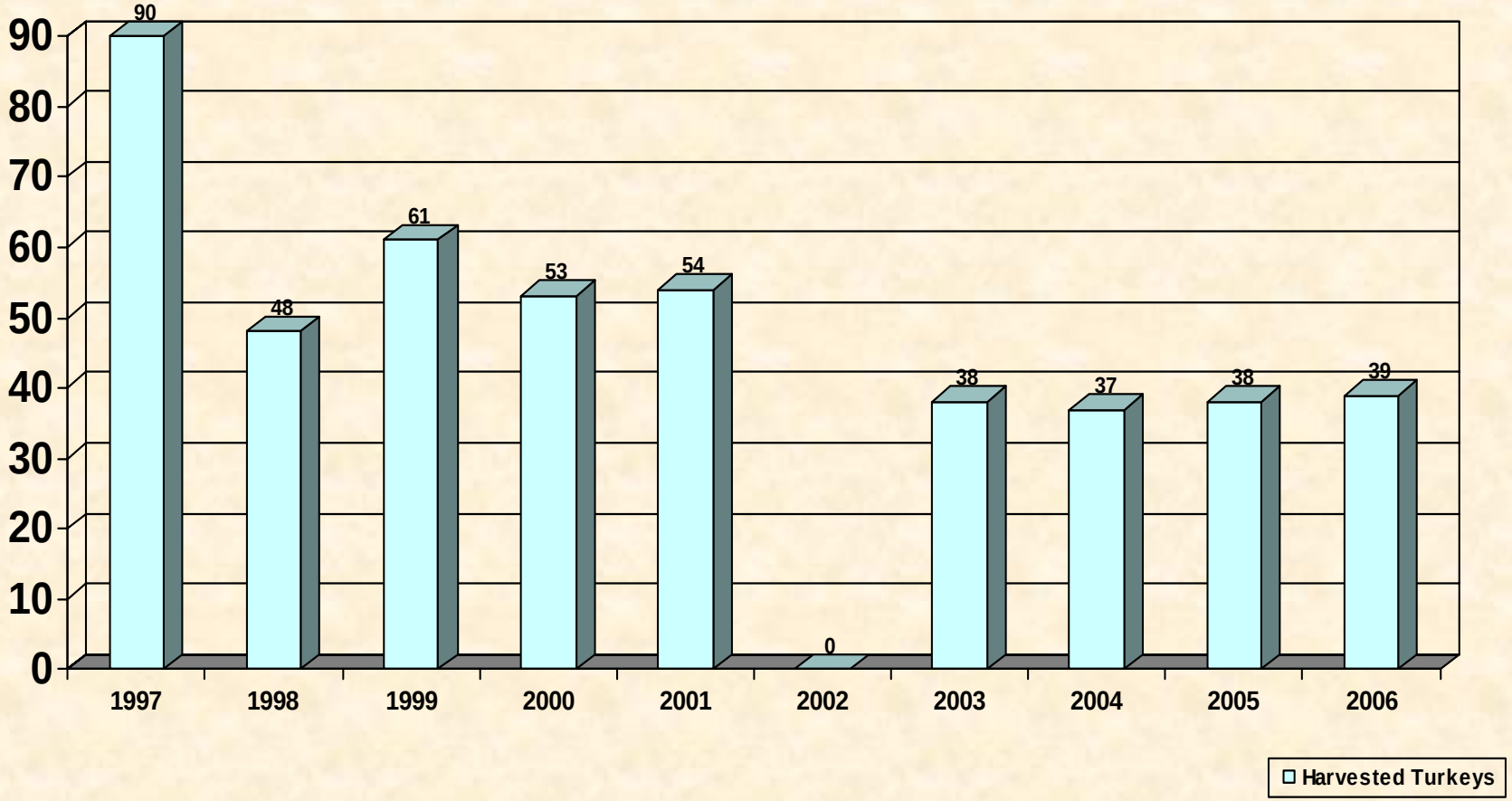

2006 OAK RIDGE WILDLIFE MANAGEMENT AREA DEER HUNTING MAP
DOE/TWRA WILDLIFE MANAGEMENT AREA
On Oak Ridge WMA, antlered bucks legal for harvest must have 4 or more one-inch antler points on one side of the rack or an outside antler spread of 15" or larger. When judging the size of antlers in the field, remember the general guideline that if the outside antler spread is wider than the buck's ears, the outside antler spread is at least 15".
15"
No hunter access from Boundary Rd. Archery hunters may not hunt within 100 yards of residential areas.
Gun hunters may not hunt within 400 yards of residential areas, facilities, cell towers, and golf courses.
KEY
HUNT DATES: Nov. 11-12, Dec. 2-3, Dec. 16-17
OPEN (Shotgun/Muzzleloader) - Permit Holders Only
Poplar Creek Rd. Unit - Permit Holders Only
Archery Equipment Only
Park City Rd./Chestnut Ridge Unit - Permit Holders Only
Archery Equipment Only
Tower Shielding Facility (TSF) Unit - Permit Holders Only
Archery Equipment Only
Safety/Security Zone (NO HUNTING) **
** See back of map.
X NO VEHICLES BEYOND THIS POINT
ATTENTION: ELK MAY BE PRESENT IN AREA. CONSULT THE TWRA HUNTING GUIDE TO LEARN THE DIFFERENCE BETWEEN ELK AND DEER.
QUOTA PERMIT REQUIRED FOR ALL HUNTS
ETTP
New 2006
Archery only to Shotgun/ Muzzleloader
ORNL
NO HUNTER ACCESS
PARK CITY RD./CHESTNUT RIDGE PERMIT HOLDERS ONLY BEYOND THIS POINT.
CHECKING STATION
Melton Hill Dam
Boundary Rd.
Bear Creek Rd.
Bethel Valley Rd.
Ridgeline
Midway Rd.
Edgemoor Rd.
Cemetery
CITY OF OAK RIDGE
Oak Ridge Tpk.
Oak Ridge Hwy.
Haw Ridge Park No vehicles allowed. Walk-in or boat access only.
Hunts Subject to Cancellation. Contact 865-574-9836 prior to scouting and hunt dates for information.
CAUTION:
* HUNTERS ARE ADVISED NOT TO SHOOT FROM OR ACROSS ANY ROAD. IT IS AGAINST THE LAW AND IS VERY DANGEROUS BECAUSE OF THE HIGH VOLUME OF PEDESTRIAN, BICYCLE, AND VEHICULAR TRAFFIC IN THE OAK RIDGE AREA.
*GUN HUNTERS MAY NOT HUNT WITHIN 400 YARDS OF RESIDENTIAL AREAS.
*RECOMMENDED MAXIMUM SAFE SPEED OFF ROAD IS 15 MILES PER HOUR. YOUR SAFETY IS YOUR RESPONSIBILITY.
NORTH
0 1 2
Miles

Wild Turkey Management

photo by Curtis Boles

- The wild turkey population on the ORR is managed through yearly spring hunts.
- Turkey hunts were initiated in 1997 as a means of managing the increasing population on the reservation. Between 1997 and 2006, 458 turkeys were harvested off the reservation.

ORR TURKEY HARVEST BY YEAR



Canada Geese on the ORR

photo by Pat Parr

The Problem with Canada Geese

- Large non-migratory flocks have developed in the past two decades.
  - Canada geese are now nesting in areas where they once only wintered.
  - Over-abundant local goose populations can create social and health problems in urban and suburban areas where they nest, feed and leave droppings.
- The high numbers of Canada geese on the ORR present two main nuisance problems:
  - propensity to leave droppings on sidewalks and parking lots.
  - sometimes aggressive behavior, especially during nesting.

Canada Goose Management on the ORR

- Management techniques used on the ORR to address goose nuisance problems:
  - Addling/oiling eggs to limit nesting success.
    - Addled 60 eggs in 2005.
    - Addled 67 eggs in 2006.
  - Relocation of geese to other areas in east Tennessee. Geese are collected for relocation in yearly round ups during their summer flightless period.
    - Relocated 117 geese in 2005.
    - Relocated 200 geese in 2006.


DOE
CHEVROLET

Canada Goose Management on the ORR (cont.)

- "No Feeding" Policy - artificial feeding tends to congregate geese and other wildlife in a small area where there may be more contact with people, resulting in more aggressive encounters. This also results in concentration of droppings, that can cause aesthetic and potential health concerns.

- Hunting – a pilot hunt was initiated in September 2006 at Freels and Solway Bends.
  - Hunting was allowed on two Saturday mornings.
    - Hunters used mainly boat access.
    - Accounted for approximately 12 geese and 6 wood ducks harvested by hunters from DOE property.

Canada Goose Management on the ORR (cont.)

- Habitat modification
  - Reduction in preferred habitat for geese; preferred habitat is large, unobstructed lawn area close to open water.
  - Elimination of islands in ponds; these serve as prime nesting sites for geese.
  - Modification of uninterrupted shorelines using shrubs or boulders.
  - Establishment of vegetative barriers (shrubs, prairie grasses) that will block pathways or obstruct line of sight making areas less attractive to geese.
  - Reduction in mowing of grass areas; geese prefer young grass shoots; they have more difficulty locating new shoots in taller grass (more than 6 inches).
  - Establishment of habitat in natural areas of the reservation (e.g., Three Bends Area).

Canada Goose Management on the ORR (cont.)

Other potential tools currently used by others:

- Use of dogs for harassment - some entities have used trained border collies or other breeds to flush geese away from unsuitable areas; dogs must be extensively trained and used on a regular basis in combination with other techniques in order to be successful.
- Use of radio-controlled boats to flush geese from ponds.

Bat Surveys on the ORR

Survey Methods Used on the ORR

- Anabat Acoustic Bat Identification System
- Mist Netting
- Cave Surveys

Recent Survey Results

- Survey of 5 sites, July 21-27, 2003.
  - Anabat Surveys.
    - Freels Bend – big brown bat, eastern pipistrelle, eastern red bat, gray bat
    - East Walker Branch – eastern pipistrelle, eastern red bat
    - Bear Creek near Hwy 95 – big brown bat, eastern pipistrelle, eastern red bat
    - McNew Hollow near Hwy 95 – big brown bat, eastern pipistrelle, eastern red bat
  - Mist Netting.
    - Bear Creek near Hwy 95 – big brown bat
    - McNew Hollow near Hwy 95 – big brown bat, eastern red bat
    - East Fork Poplar Creek near Scarboro Rd – big brown bat, eastern pipistrelle, eastern red bat

- Survey of Pond K1007 P1, ETTP, August 14-16, 2004.
  - Anabat Surveys
    - big brown bat, eastern pipistrelle, eastern red bat, gray bat

Recent Surveys (cont.)

- Survey of 4 Caves at ORNL, July 24-28, 2006.
  - Cave surveys
    - Big Turtle Cave – one unidentified bat
  - Mist netting at cave entrances
    - Big Turtle Cave – eastern pipistrelle, northern long-eared bat
    - Little Turtle Cave – eastern pipistrelle, little brown bat, northern long-eared bat, seminole bat, gray bat
    - Copper Ridge Cave – little brown bat, northern long-eared bat
    - Pinnacle Cave – big brown bat

Significant Findings of Recent Bat Work

- Two bat species not previously reported for the ORR were captured in 2006.
  - Little brown bat, which is relatively common in the region.
  - Seminole bat, for which there are few records in Tennessee.

- Gray bats (federally endangered)
  - Recorded on the ORR using the Anabat system.
    - Freels Bend in 2003.
    - K1007 P1 Pond, ETTP in 2004.
  - Captured in mist nets.
    - Little Turtle Cave in 2006.
  - Because gray bats roost in caves during both summer and winter, bats detected and captured recently were probably from a gray bat summer roost.
  - Because two of the bats captured in 2006 were newly volant young, their summer roost is very likely in close proximity to Little Turtle Cave.
  - ORR studies show presence only along major watercourses and in areas with significant cave systems.

Nuisance Wildlife Management



- Adaptable wildlife, such as raccoons, opossums, and skunks, can cause nuisance problems when they enter buildings to find den sites and frequent open dumpsters in search of food.

- Wildlife managers on the ORR encourage good building maintenance and closure of dumpsters to discourage entrance by these animals. Animals that do become a nuisance are trapped and removed from the area.

Nuisance Wildlife Management

- Nuisance birds, such as starlings, house sparrows and pigeons, can cause concerns with their propensity to nest and roost in buildings. ORR wildlife managers encourage good building maintenance and keeping other points of entry (e.g. doors and windows) closed wherever possible. Keeping outdoor eating areas clean of food scraps is also important in keeping these birds away.