



2021 QUAIL HOLLOW CONTROLLED HUNT PROPOSAL

Purpose:

Regionally and throughout the state, changes in habitat and the elimination of natural predators have allowed deer herds to grow to unnatural densities. In order to restore and maintain a balanced ecosystem, Stark Parks proposes an annual deer management program.

White-tailed deer (*Odocoileus virginianus*) are one of the most common wildlife species in the eastern United States. Although enjoyed by many, high deer populations can negatively impact crops and native vegetation through over browsing (Dewey, n.d.), and lead to increased motor vehicle collisions (Ristau et al., 2012). These impacts are often most notable in areas where hunting is not permitted, such as in state and local parks. One particular park in our region that suffers from an overpopulation of deer is Quail Hollow.

In 2021, a study of the White-tailed deer population was completed by Malone University student Camryn Ottey and supervised by Professor Jason Courter. Seven motion-sensing infrared cameras were placed throughout Quail Hollow Park from 1-20 January 2021. When motion was detected, a camera took a 2-picture 'photo burst' and did not take another picture for 5 minutes (only the picture with the most number of deer was analyzed). They reviewed the photos in the lab and identified the number of unique bucks by their antlers.

They were able to estimate the number of unique antlerless deer based on the following formula:

$$\frac{\text{number of unique bucks}}{\text{total number of buck pictures}} = \frac{\text{number of unique antlerless deer}}{\text{total number of antlerless deer pictures}}$$

They then added the number of unique bucks and the number of unique antlerless deer to estimate the population size. They also utilized a more conservative method based on a 3:1 doe to buck ratio (Adams, 2013).

Over the 3 week study period, they reviewed 15,838 photos of deer and other wildlife. After identifying one picture from each 'photo burst' to analyze and removing pictures of other wildlife, 5,928 antlerless deer, 1,024 bucks, and 1,471 unidentifiable deer were counted. They identified 58 unique bucks from the pictures, 21 of which had at least 8 points.

Their deer density estimate at Quail Hollow Park ranged from 212 to 360 deer/square mile. These calculations were based on the following two methods:

Standard Method: With 58 unique bucks among 1,024 buck pictures and 5,928 antlerless deer pictures, they estimated that 336 unique antlerless deer and 394 total deer are present at Quail Hollow. This corresponds to a deer density of 360 deer/sq. mile.

EXHIBIT A

Conservative Method: In an unmanaged park after the breeding season, a 3:1 doe to buck ratio is expected (Adams, 2013). With 58 unique bucks, they estimate that 174 antlerless deer are present at Quail Hollow (which likely includes some 'button bucks') and 232 total deer. This corresponds to a deer density of 212 deer/sq. mile.

Biologists often suggest that the optimal deer density in healthy forests is 15-28 deer per square mile (Ristau et al., 2012). Ottey and Courter's estimates (between 212 and 360 deer/square mile) indicate that Quail Hollow is severely overpopulated with deer. It is likely that the overabundance of deer at Quail Hollow is negatively affecting ecosystem function.

Therefore, we propose that Stark Parks start and maintain a controlled hunting program at Quail Hollow Park in conjunction with the Ohio Department of Natural Resources. The proposed parameters of this program are outlined below.

Quail Hollow Park Controlled Bow Hunting Program Rules and Regulations

Stark Parks bow hunting rules are in addition to Ohio Department of Natural Resources (ODNR) rules and regulations. Each bow hunter must read, sign and follow the complete list of rules and regulations. Failure to comply with regulations will result in possible fines and disqualification from any Stark Parks hunting program. Applicants are defined as persons who have submitted applications for consideration in the Stark Parks bow hunting program but have not passed the current year's qualifications. Bow hunters are persons who have successfully completed the qualifications process.

APPLICATIONS

1. Applications will be made available on our website, www.starkparks.com. There is a non-refundable \$15 application fee.
2. Applications will only be accepted from Stark County residents.

SELECTION

1. The lottery will be held virtually with the winners being notified of their selection.
2. All selected applicants are eligible for one (1) two-week session during Ohio Deer Archery season.
3. Applicants will chose their two-week session and assigned zone in the order they are selected in the lottery.
4. Applicants may bring one hunting companion to hunt with them during their session. The companion does not have to be a Stark County resident. Companions must meet the following requirements:
 - A. All companion hunters are subject to the same rules and regulations as the lottery winning applicant.

EXHIBIT A

- B. Lottery winners must declare their companion hunter upon winning the hunting lottery.
 - C. All companion hunters must pass the same qualification listed above at a separate "companion hunter qualification day."
 - D. All companion hunters will pay a \$15 processing fee.
- 5. Up to 20 alternates will be selected in addition to the lottery winners. These alternates will have the opportunity to qualify. They are only able to select a slot if slots are still available after all lottery winners qualify and select a slot.
 - 6. If any time blocks are available after the lottery concludes, they will be available on a first-come first-served basis.

QUALIFICATIONS

- 1. Lottery winners will be required to produce a valid hunting license and **at least one \$15 antlerless deer permit**. Apprentice licenses will not be accepted for this hunting program. An applicant is attesting they have successfully completed a hunter's education course by submitting an application for this program. Those who need to take a hunter safety course can fulfill this requirement through ODNR.
- 2. Each applicant should allow time to check in and receive their target prior to their scheduled range time. Applicants who do not arrive to the range on time will not be allowed to shoot until the end of the next group's time.
- 3. To qualify, each applicant must be able to place at least four out of five arrows in a 10" diameter target from a position at 20 yards.
- 4. If any part of the arrow tip touches the outer black line of the target, it will be considered a miss.
- 5. Once on the qualification range, each applicant has one opportunity per bow to pass. If they fail to qualify, their name will be removed from the list and the next alternate will be placed at the bottom of the lottery winner's list.
- 6. You may only hunt with the bow(s) you used to qualify with. However, you may qualify with up to two bows. Failure to qualify with the harder bow does not mean disqualification from program.
- 7. If your bow malfunctions while qualifying, you may step out of line and make repairs, but qualifications will proceed without you. When your bow is repaired notify the ranger and you will be allowed back in line to qualify.
- 8. All equipment must conform to the State of Ohio requirements.
- 9. Youth applicants and their adult companion must submit separate applications. Each applicant's name will be entered into the qualification process.

EXHIBIT A

10. Except for youth or applicants with disabilities, you must be able to draw your own crossbow without help from another. Cocking devices are allowed, but no assistance is permitted for compound bows regardless of age or ability due to safety concerns.
11. If the youth applicant fails to pass the qualification they may not hunt in this program. If the youth qualifies but the adult does not, the adult may accompany the youth but may not hunt. Youth must be accompanied by an adult, as outlined by the state regulations. Non-bow hunter adults accompanying youth must also read and sign acknowledgement of the rules, and remain present with the youth bow hunter who has a copy of the Stark Parks permission to hunt letter.
12. Applicants in need of accommodation and their adult companion must submit separate applications if both are hunting. However, the companion of the applicant with disabilities does not need to be in this program if they will not be hunting. Hunting in areas designated for people with disabilities by companions when the person that they are assisting is not present is prohibited. Companions are permitted to hunt in their own area when not assisting the bow hunter with disabilities.

PREPARATION

1. Scouting can be done by lottery winners before and after qualifications. However, applicants must successfully qualify to become a bow hunter to continue scouting after qualifications. Two weeks prior to the hunting season all areas will be closed to scouting.
2. Baiting and placing tree stands by applicants are prohibited prior to season qualifications.
3. All hunting items left in the field by bow hunters must be marked with the bow hunters' name and contact number. Hunting items include but are not limited to: tree stands, trail cameras, blinds, and feeders. Tags must be no higher than 6 feet off the ground. Equipment without legible contact information will be removed.
4. Only currently-assigned bow hunters can have tree stands up, unless approved by the program coordinator.
5. Bow hunters in the first session may put their hunting equipment up after qualifications. However, two weeks prior to the hunting season no one should be in the woods, other than first session bow hunters. If you need to move your stand please do so in the middle of the day when you are less likely to interrupt other bow hunters.
6. No bow hunter can use another bow hunter's tree stand without permission.
7. Only limited clearing of shooting lanes is allowed. Cutting of sticks, branches or bushes larger than ½" is prohibited.
8. Bow hunters will be able to bait their zone using whole kernel corn or natural bait like acorns and apples. No powdery substance, salt or mineral blocks, or compressed corn blocks are allowed.
9. Any flagging applied by the bow hunter must be removed at the end of their 2 week slot.

EXHIBIT A

EQUIPMENT

1. All equipment must conform to the State of Ohio requirements; see their website below for details: <http://wildlife.ohiodnr.gov/hunting-trapping-and-shooting-sports/hunting-trappingregulations/allowable-hunting-equipment>.
2. Tree stands that meet Tree Stand Manufacturers Association (TMA) safety specifications are permitted. For a list of products that meet safety standards go to www.tmastands.com/product/.
3. Wearing of a safety harness is required with use of any tree stand. The harness must be worn while hunting off the ground. Failure to do so will result in loss of hunting permission for a full season and a warning. Climbing, ladder, tripod stands and pop-up blinds are allowed. Hunting on the ground is also permitted. It is unlawful to construct, place or use a permanent-type tree stand, or to place spikes, nails, wires or other metal objects into a tree to act as steps or to hold a tree stand on Stark Parks property.
4. Check stands for signs of tampering before each use. Stark Parks cannot be responsible for any equipment left unattended.
5. No more than two (2) tree stands/blinds or trail cameras may be installed.
6. Take all safety precautions when climbing a tree.
7. All equipment must be removed from the zone at the end of your assigned session.

BOW HUNTING ZONES AND SAFETY ZONES

1. The center of the hunting zone will be marked with an orange carsonite marker. The permitted hunting zone will extend 150 yards out from the marker in all directions to create a circle shaped zone. The general circle boundary will be marked with flag tape. Hunters shall set up so that their arrows are not likely to exit the hunting zone. Maps will be provided to lottery winners. It is the responsibility of each bow hunter to know where the zone boundaries are and to stay within them.
2. At no time is a bow hunter allowed to shoot on private property unless they have obtained written permission to hunt on said property. Safety zones must be maintained.
3. Bow hunters must maintain a safety zone of no less than 50 yards from any building, road, picnic area, official trail or developed area.
4. A bow hunter is not permitted to shoot into a safety zone unless the following applies: An injured deer may be shot in the safety zone provided the bow hunter shoots towards the interior of the hunting area and the shot will be in a downward direction.

EXHIBIT A

BOW HUNTING AND HARVESTS

1. Archery season hours are one-half hour before sunrise to one-half hour after sunset. The official times for sunrise and sunset are found in the hunting digest. Be sure to use the times for Eastern Ohio.
2. You must park in designated areas.
3. If you will be in the park tracking a deer more than 1 hour after sunset you must notify a ranger at 330-353-2378.
4. No scouting is permitted during another bow hunter's session.
5. Only bow hunters are permitted in bow hunting areas during the season with the exception of youth and bow hunters with disabilities accompanied by a companion.
6. The permission letter provided by Stark Parks must be carried at all times.
7. Place your parking ID card with your name and zone # on your dash board.
8. Motorized vehicles will not be permitted beyond the designated parking areas.
9. For conflicts between visitors or landowners, or to report unauthorized activities, contact Stark Parks Rangers at 330-353-2378. Do not confront these people yourself.
10. Hunter orange must be worn during the Youth Deer Gun Season, Deer Gun Season, and the Statewide Muzzleloader Deer Season.
11. Bow hunters may harvest as many deer as are allowed by State Law for Stark County.
12. In the event that a deer is wounded and reaches the park boundary, contact Stark Park Rangers at 330-353-2378. **DO NOT FOLLOW A WOUNDED DEER ONTO PRIVATE PROPERTY AND DO NOT SEEK PERMISSION OF ADJOINING PROPERTY OWNER WITHOUT A RANGER PRESENT.**
13. Once a deer is harvested, the deer must be legally checked in to ODNR. In addition, Stark Parks must be notified of the location, sex, date and time of the kill online within 24 hours at www.starkparks.com/harvest. Your harvest has not been recorded until you receive an email verification. If you encounter any problems with the online form, reach out to the coordinator. If they are unable to assist, report your harvest within 24 hours of harvest to rangers@starkparks.com. Include your name, deer's sex (buck, button, doe), approximate age (adult or yearling), date and time of kill, location, and deer tag number.
14. Be discrete and field dress your deer out of view of any roads or trails.
15. Bow hunters may be checked periodically by Ohio Division of Wildlife Officers or Stark Parks Rangers to ensure compliance. The harvested deer will belong to the bow hunter. Field dressed deer from the program can also be donated to local charities.
16. Call Stark Parks Rangers at 330-353-2378 to report injured or sick deer.
17. Harvesting an antlerless deer is first is not required, but is encouraged by the requirement to purchase a \$15 deer management permit only valid for antlerless deer.

EXHIBIT A

TRANSITION DAY

1. Transition day is the last Friday of each hunting session. This is best time for exiting bow hunters and the next bow hunters to either put up or take down their stands. However, exiting bow hunters may still be hunting on the last day so be considerate and coordinate the timing of your transition.

REMOVAL FROM THE PROGRAM

1. Bow hunters engaging in behavior including but not limited to acts or threatened acts of intimidation, violence or any behavior that causes a disruption to the harmony of the program will be permanently removed from the program.
2. Hunters must report unrecovered deer. Failure to report an unrecovered deer will result in removal for one (1) full season from the program, including the remainder of the current season.
3. Violating State Law or Stark Park Ordinances will result in a citation and removal for one (1) full season, including the remainder of the current season.
4. Three verbal warnings or one citations over one (1) or more hunting seasons will result in permanent removal from the program.
5. Offenses or actions that seriously jeopardize the program will result in permanent removal from the program.

HOW TO REACH US

1. For emergencies, dial 9-1-1
2. To have a Ranger dispatched to your location, call the Stark County Sheriff's Office Dispatch at 330-430-3800.
3. For general information or to speak to a Ranger, call Ranger Headquarters at 330-477-3609.

EXHIBIT A

PROPOSED SESSIONS FOR 2021-2022

ZONE	SESSION DATES	ASSIGNED HUNTER
1	September 25-October 8	
2	September 25-October 8	
3	September 25-October 8	
4	September 25-October 8	
1	October 9-October 22	
2	October 9-October 22	
3	October 9-October 22	
4	October 9-October 22	
1	October 23-November 5	
2	October 23-November 5	
3	October 23-November 5	
4	October 23-November 5	
1	November 6-November 19	
2	November 6-November 19	
3	November 6-November 19	
4	November 6-November 19	
1	November 20-December 3	
2	November 20-December 3	
3	November 20-December 3	
4	November 20-December 3	
1	December 4-December 17	
2	December 4-December 17	
3	December 4-December 17	
4	December 4-December 17	
1	December 18-December 31	
2	December 18-December 31	
3	December 18-December 31	
4	December 18-December 31	
1	January 1-January 14	
2	January 1-January 14	
3	January 1-January 14	
4	January 1-January 14	
1	January 15-January 28	
2	January 15-January 28	
3	January 15-January 28	
4	January 15-January 28	
1	January 29-February 6	
2	January 29-February 6	
3	January 29-February 6	
4	January 29-February 6	

