#### Supplemental Information for Proposed Rule Changes for Deer Hunting

Prepared by:

Joe N. Caudell, Ph.D. State Deer Biologist Zack Delisle, Ph.D. Deer Research Biologist

# Introduce a Statewide Antlerless Bag Limit of Six Antlerless Deer and Remove the Bonus Antlerless Deer Designation

Currently, hunters can theoretically harvest the total amount of deer available in each county, in addition to the bag limits for archery and muzzleloader licenses. This is often a source of confusion for hunters who are trying to determine how many deer they can harvest. Often, upon learning that each hunter can harvest between 150 and 400 antierless deer (depending upon the year and the total number of bonus antierless deer available for each county), hunters have expressed that they believe DNR is mismanaging the deer herd and that the ability for each hunter to harvest that many deer is socially irresponsible. To reduce the total number of deer that can be harvested statewide, however, would require a change to the current rule (312 IAC 9-3-4) that governs the take of antierless deer. Therefore, DFW has proposed a rule change to allow a single hunter to harvest a maximum of six antierless deer through a combination of archery, muzzleloader, and antierless licenses. This change would not include special hunts, such as those on military lands, state parks, or deer reduction zones.

The current system of management is based on hunters being able to harvest antlerless deer in addition to the antlerless deer they can harvest for each bag limit for each license type, which are referred to as bonus deer. When this program was started, the designation "bonus" made sense because hunters were used to a bag limit of up to two antlerless deer taken with archery licenses, no antlerless deer taken on a firearms license, and up to one antlerless deer taken on a muzzleloader license. But over time, hunters have forgotten what the bonus designation refers to, confusing them as to how many deer they can harvest in each county. This is one of the most frequent calls to the Deer Hotline in Indiana (see results of Deer Hotline Use in this section). To resolve this confusion, DFW has proposed a rule change to remove the bonus designation from the county antlerless quota system so that the total number of antlerless deer that can be harvested within a county, regardless of equipment or license type, is the county antlerless quota.

In general, respondents from the GotINput process were supportive of both proposed rules, and there was no outright opposition to a statewide bag limit. Several comments indicated that some respondents misunderstood the intent of the rule, thinking that it would mean that each county would have an antlerless quota of six, rather than each county quota being individually set (as is currently done) and the total number of deer that a hunter can harvest statewide being six. Other respondents supported this approach, but suggested a lower limit, ranging from one to four per hunter statewide.

A total of 52 individuals responded via the GotlNput process to the proposed rule change of creating a statewide bag limit of six deer and removing the "bonus designation" from the rules with a total of 96% agreeing to some degree with the proposal. Fourteen individuals (27%) agreed that there needs to be limits on the harvest but misunderstood the intent of the proposed rule. The intent was to limit each individual to being able to harvest a total of no more than six antlerless deer statewide. Similar to the results of the deer management survey, many of these respondents indicated that they believed DNR was attempting to remove county limits and impose a quota of six antlerless deer in each county.

Eighteen respondents (35%) agreed with the proposed rule as written, while 12 additional respondents (23%) agreed with a statewide limit but thought it should be around four deer. Only two individuals disagreed with the proposal. One stated that as long as a hunter stayed within each individual county's limit, they should be allowed to harvest as many deer as they need (i.e., keep the status quo). The other respondent thought a bag limit would cause more people to harvest more deer for bragging rights. Six respondents agreed with removing the bonus designation from the antierless deer regulations, and none opposed this change.

We asked a question about limiting the total number of antlerless deer that each hunter can harvest in Indiana to six antlerless deer in the 2022 Deer Management Survey, and we received 17,195 responses. Of those, 74% supported this to some degree (48% of those strongly supporting), 12% were neutral, and 14% opposed (7% opposing; 7% strongly opposing) this proposal.

We also asked a question about removing the "bonus" deer designation from rules in the 2022 Deer Management Survey. We received 16,691 responses to this question. Of those, 64% of hunters supported this rule proposal (37% strongly supporting; 27% somewhat supporting), 24% were neutral, and 12% were opposed (6% opposing; 6% strongly opposing).

Based on harvest records, only a fraction of hunters desired to harvest one buck and six does. In the last three years, about 3.5% of hunters desired to shoot five or more deer. In the 2019-2020 season, 0.7% of hunters (34 total) harvested five or more deer. In general, people do not harvest more than seven deer (Table 3-5 from the 2020 Indiana White-tailed Deer Report); approximately 70% harvest one deer. In 2019 and 2020, less than 0.1% of hunters (37 total) harvested eight or more deer. In 2019, only 35 hunters statewide harvested eight or more deer. In 2020, only 37 hunters harvested more than eight deer. Nevertheless, the fact that hunters can harvest hundreds of deer each is one of the most contentious aspects of deer management in Indiana. Most hunters believe that other hunters should not have the unrestricted ability to harvest hundreds of deer statewide.

Adding a statewide bag limit will greatly reduce confusion among the public and reduce the burden to staff responding to questions and comments about the total number of deer that can be harvested per person. This will also more accurately reflect the harvest and what is considered to be socially acceptable.

The reason for the proposed change regarding the "bonus" designation is that many hunters do not remember the reason for this language, and it often confuses them (i.e., "what does bonus mean") when they are trying to determine how many deer they can harvest. This change would cause the county antlerless bonus quota to become the quota for the number of does potentially harvested in that county, which would be a simple explanation for how many deer can be harvested in a specific county. Many hunters will likely not notice this change, and thus it should not affect hunters or hunting in any significant manner; however, specific rules are based on the "bonus" language, such as the Special Firearms Antlerless Season and the rule that prohibits the use of bonus antlerless licenses on land owned by the DFW. Those will also need to be changed.

The proposed change would not affect military hunts, deer reduction zones, or other special licenses, so hunters will still have the opportunity to harvest additional deer if they desire. This proposed change should improve public opinion of the DNR because we will no longer give each hunter the opportunity to

potentially harvest more than 400 deer. Although this has never happened, it is the perception of hunters that deer are overharvested. Not making this change will result in the status quo.

# Not Allow Hunters to Shoot Antlerless Deer on Fish & Wildlife Properties with a Firearm

The DNR asked hunters their opinion of not allowing hunters to shoot antlerless deer on Fish & Wildlife areas (FWAs) with a firearm. We received 16,478 responses to this question with 54% of hunters supporting this rule proposal (33% strongly supporting; 21% somewhat supporting), 29% were neutral, and 17% opposed this rule (9% strongly opposing; 8% somewhat opposing). Currently, bonus antlerless licenses/bonus antlerless deer cannot be used on FWAs, so this change to the rule language will result in the status quo.

# Change the Bundle License to One Antlered Deer and Two Antlerless Deer

The bundle license currently allows hunters to harvest one antlered deer and two antlerless deer, or three antlerless deer. Although it is generally considered economically advantageous for hunters to have more choices than fewer, in this case, the additional choice often confuses hunters. It takes a lengthy and complex explanation for hunters to fully understand all the options that can be used with the bundle, such as: being used over multiple seasons; three antlerless deer, but not two antlered deer; bonus antlerless deer cannot be harvested on FWAs, but antlerless deer can, provided they are taken during the archery and/or muzzleloader season and they are not bonus deer; etc. Therefore, to make Indiana's hunting regulations simpler, we proposed changing the bundle license to one antlered deer and two antlerless deer.

We received 19 responses to this question on the GotINput process. Ten people agreed with the proposed change, seven disagreed, and two had additional questions as to our rationale for this change. The primary motivation is to make our licenses easily understood. By changing the bundle to one antlered and two antlerless deer, explanation on the use of this license will be simpler. New hunters are often confused about what a license can be used for. Our surveys also show that a buck and two does or hunting during multiple seasons for a buck and the desire to also harvest a doe is the most common goal of hunters. The 2020 Deer Management Survey found that 76.3% of hunters want to harvest a buck. The most common combinations were the desire to harvest one buck and one doe (29.8%), one buck and two does (22.0%), or a single buck (18.6%), which is often hunted over multiple seasons. Only 4.8% of hunters wanted to harvest three deer, regardless of its sex (Boggess and Vaught 2021).

We asked a question about changing the bundle to allow hunters to only harvest one buck and two does in the 2022 Deer Management Survey. We received 16,374 responses to this question. Of those, 62% of hunters supported the proposed rule (40% strongly supporting), 19% were neutral, 18% opposed (11% strongly opposing). This change would align with current harvest quotas (i.e., one buck and two does per county).

#### **Combine the Archery and Crossbow License**

In Indiana, different licenses are required to hunt deer in different seasons and/or to hunt a buck or doe. Archery is currently the only season that requires a different license to use a different type of archery equipment. Crossbows are typically distinguished from vertical-type bows because they have some type of limb mounted on a stock, and the bow string is released via some type of trigger. This is compared to vertical bows with which the bow is held with an outstretched arm and released with a trigger held in

the hand and/or directly by the finger. Both require some type of limb, string, and long projectile. Vertical bows are further broken down into types (e.g., recurve bows, compound bows, long bows) that often represent some level of technological advancement. Therefore, because of the many types of bows, we propose to combine the archery and crossbow license into one license type.

In the GotINput process, we received 34 total comments with 24 (71%) supporting the inclusion of crossbows into the archery license and 10 comments (29%) that disagreed with this proposal. Most of the agreement was that it would simplify the license structure, reduce confusion about what equipment could be used during archery season, and there was no point to have an equipment-specific license inside a single season. The opposition varied, ranging from opposition to crossbows being in the archery season to the importance for DNR to understand the impact of crossbows on the deer population (that does not occur with vertical archery equipment). The Indiana DNR monitors trends of indices of deer populations annually to ensure that we have a thriving deer population for decades. Crossbows have been legal throughout all archery seasons since 2012, and their use is steadily increasing in Indiana. Much of this increase is being driven by archery hunters changing over to crossbow equipment. There has been no indication of population impacts associated with the use of crossbows and thus no indication that their use is detrimental to Indiana's deer herd. The combination of the archery and crossbow equipment into a single license will not cause any significant change in harvest because the two equipment types currently share a single season.

Additionally, state law was changed in 2022 to allow crossbows and bolts to be included as legal equipment with bows and arrows in IC 14-22-12-1.

A question in the 2022 Deer Management Survey asked about combining the archery and crossbow licenses into one license. We received 16,462 responses to this question. Of those, 73% supported this rule proposal (61% strongly supporting; 12% somewhat supporting), 12% were neutral, and 19% opposed (11% strongly opposing; 7% somewhat opposing).

Because it is assumed that archery hunters will have the strongest opposition to this change and will be the group most affected, we looked at hunters who only reported that they archery hunted in 2021 and used no other equipment during the various seasons. We had 894 archery-only respondents out of 16,462 total respondents (5.4%). Of those, 44% supported this proposal (31% strongly supporting; 13% somewhat supporting), 18% were neutral, and 38% opposed (30% strongly opposing; 8% somewhat opposing).

We recognize the desire of hunters to keep seasons specific to a type of equipment and to place certain limitations on others who hunt that season. But one of the goals for the Deer Program is to simplify the rules that govern deer hunting so that hunters desiring to enter the sport are less confused by the myriad of regulations. If this proposal is accepted, it will simplify what license is needed for hunting during archery season and increase the value of the archery license.

#### Change the Muzzleloader Regulations to Allow .40 caliber Muzzleloaders

The Deer Program and DNR regularly receive requests to change caliber restrictions. As new technology develops, smaller caliber or different equipment types become effective for taking deer humanely. Recent advancements have placed .40 caliber muzzleloading rifles in this category. Using appropriate powder and bullet combinations, the .40 caliber muzzleloading rifle can produce comparable velocities

to those of a .308 Remington. In 2021, the Deer Program received several requests from hunters to lower the minimum caliber to .40 inches. Therefore, we recommend pursuing a change in the rule language to reduce the minimum caliber from .44 caliber to .40 caliber.

#### Replacement of Deer Identified as Unfit for Human Consumption

During deer season, wildlife biologists, conservation officers, and staff receive calls from hunters who have harvested a deer with concerns that the meat is inedible. Currently, staff examine photos and/or evaluate the condition based upon observations by biologists and conservation officers. Biologists decide whether to allow a person to harvest another deer if we judge the harvested deer as inedible. If someone calls with concern over the edibility of antlerless deer, and there is evidence of systemic infection, we allow them to take another antlerless deer on that license. This is a relatively simple and uniform process because the sole issue is the edibility of the meat.

But when someone calls with a potentially inedible buck there can be confounding issues related to the desirability of large antlers. We have found over time that some hunters who are dissatisfied with the antlers on their buck, or desire two sets of antlers, will find something aesthetically wrong with the carcass and ask to harvest another buck. If we decide that a buck is inedible, then we also must arrange for biologists or conservation officers to collect the antlers. This often lengthens this process because the hunter must decide if they are willing to keep the antlers but not the meat. In each case, DNR staff are left separating the issue of antlers from the meat. This often leads to inconsistent decisions or requires staff to be inflexible when there is a unique situation. Currently, we have no option to help these customers who have a harvested a deer that cannot be eaten but who want to keep their antlers to memorialize a hunt.

The most recent example of this was when a young lady called with a deer that was clearly inedible (as determine by her processor and photos of the carcass) that was the first deer she had ever shot, recovered, field dressed, and gotten to the processor without any help from another person. She wanted to be able to have the antlers serve as a memory of the hunt, but to replace her deer, we would have needed to confiscate the antlers. She very much desired to put meat in her freezer for her family. The result was that she was a dissatisfied customer because there was no tool to address this situation.

The solution to when we observe some systemic infection that we believe would make a harvested deer inedible would be to **offer replacement of the meat with an antierless deer privilege**. This approach would be more consistent for the customer and would replace the meat portion of the deer without needing to take away the antiers they harvested (in the case of a buck).

This is different from the process where we suspect a disease (e.g., CWD suspect, bTB suspect, etc.), confiscate the deer, and then allow them to take another deer on that same license. That process should remain in place for a deer that we confiscate for herd health reasons.

The public would not incur any costs or increased burden, and it should shorten the time required to make these decisions because biologists and conservation officers do not have to factor in picking up antlers or placing differential scrutiny on antlered deer vs. antlerless deer. This is in-line with DNR's desire to provide exceptional customer service.

# **Change the Designation of Two Handgun Cartridges**

The proposed rule is to change the language for handgun cartridges .25/20 and .32/30 (which are not allowed for hunting) to .25-20 Winchester and .32-20 Winchester. The rule change was made several years ago to make these two cartridges illegal for deer hunting because they do not have sufficient energy to rapidly incapacitate a deer. However, at some point, the language was edited from .25-20 to .25/20 and from .32-30 to .32/30, neither of which are actual calibers of handguns. The change will correct this issue.

#### Allow Portable Tree Stands to be Placed Earlier and Left Later on Public Land in Deer Reduction Zones

The rule to allow portable tree stands and ground blinds to be placed on DNR properties between noon on Sept. 1 and February 8 was at the request of a hunter who pointed out the current rule that governs when tree stands can be placed and removed on public land does not account for areas where the deer season starts earlier and ends later on public land that is contained within a deer reduction zone. This change to the rule language will correct this issue.

# **Add Language for Locations of Deer Reduction Zones**

Deer reduction zones (DRZs) target areas that have high deer populations and high human density or use, resulting in concerns about deer-vehicle collisions (DVCs) and personal property damage. The DNR designates an area as a DRZ to manage deer conflicts through sport hunting. A DRZ provides hunters with additional opportunities to take deer in that area. The goal is to reduce deer-human conflict; it is not to eliminate the deer population. Incorporating or increasing hunting helps manage deer populations and increases deer wariness of humans, which can also reduce conflicts.

The smallest deer management unit in Indiana has traditionally been the county; however, a DRZ allows the DNR to target areas within a county for management. This should allow deer in one part of a county to remain stable or increase while decreasing populations in another part of the same county. The approach coincides with Indiana's current deer management plan which is to strategically manage Indiana's deer herd. That means, in some areas, there should be a larger deer population, while in others the population should be maintained or reduced. The DRZs allow managers to target such areas without reducing county-wide deer populations.

Researchers identified potential areas with high human-deer conflict or high use by mapping areas with high human density and/or high rates of deer-vehicle collisions. Other conflicts may include reports of deer damage by landowners, requests for deer damage permits, or calls for assistance through our district and urban biologists. Another consideration is a community's desires. In some areas, a limited amount of hunting may already be occurring, and a community may be happy with the current level of hunting. In some situations, a DRZ may be counterproductive to hunting access, because community leaders may feel pressured and respond by restricting hunting through local ordinances. Alternatively, communities may ask for a DRZ so they can continue an urban hunting program. Biologists seek local input to determine the community's reaction to a possible designation. An area may be identified as a candidate for a DRZ if there is a disease risk to humans or livestock as a result of high deer density. Selection as a DRZ would require a series of deer disease surveys and a determination by public health officials, domestic animal officials, DNR biologists, and veterinarians that wildlife is a primary reservoir for a disease and that reducing the deer population would significantly lower the transmission risk to humans, livestock, and/or wildlife. The designation process results in two types of DRZs: traditional and corridors. Traditional DRZs are established near or around urban areas and encompass a community.

Alternatively, DRZ corridors are created along portions of major roadways to specifically address high rates of deer-vehicle collisions.

The increased allowable antlerless harvest and lengthened season mean that Indiana's deer hunters can help address problem areas and potentially reduce the need for other measures, such as sharpshooting by paid contractors or the use of deer damage permits. DRZs can increase hunting opportunities for deer in urban environments and help alleviate human-deer conflicts. Communities can determine the location and time of the hunts and which hunters can participate. There are also individuals who are trained to carry out urban and suburban hunts who can be contracted to assist with establishing and operating hunts in these areas. A designation as a DRZ can also demonstrate an identified need to community leaders to address deer concerns. In turn, this increases access to hunting, which can help reduce damage in a targeted manner.

The Deer Program recently conducted an analysis to determine the effectiveness of DRZs in reducing deer vehicle collisions. We found a decrease of deer vehicle collisions within DRZs of 23.8% after allowing hunters to harvest additional deer within DRZs. Our results demonstrate the effectiveness of using targeted recreational hunting as a management tool to reduce deer vehicle collisions.

### **County Antlerless Bag Limits**

Since 2017, county bonus bag limits have been set on an annual basis using the following: information on hunter's desires for the population to change (i.e., increase, decrease, or stay the same) from the Annual Deer Management Survey; trends in various deer population indices including deer vehicle collisions, Archer's Index, changes in effort to harvest deer, deer damage permits, and others; professional opinions of wildlife biologists and conservation officers; the effects of disease; and the effects of changes on hunters and the deer population. Most recently, we have added data about deer density from the Northeastern, East Central, and Southern Deer Management Units (DMUs) from the Purdue Integrated Deer Management Project. Because the county antierless bag limit will now be a combination of the various equipment bag limits and the county bonus bag limit, we used the following method to create the proposed antierless bag limit for inclusion in the rule package:

- Because prior county bonus antlerless bag limits decisions were based on the data gathered
  each year, we did not review the raw information, just the result (i.e., the selected county bonus
  antlerless bag limit for a particular year) using data from the county data available at
  <a href="https://www.in.gov/dnr/fish-and-wildlife/wildlife-resources/animals/white-tailed-deer/county-data/">https://www.in.gov/dnr/fish-and-wildlife/wildlife-resources/animals/white-tailed-deer/county-data/</a>.
- We selected 'normal' years (i.e., not a COVID year and not an epizootic hemorrhagic disease [EHD] recovery year)
  - Most often, data from 2022 was selected unless a county was still in a recovery period from EHD. In those cases, 2018 was selected as the next best alternative.
- We examined the number of affected individual hunters and the number of deer that would not be harvested at a proposed county bag limit (or the increase in harvest at a proposed county bag limit).
- We selected a bag limit where very few hunters (less than 10) would be affected by this new bag limit and a number where hunters were using the available bag limit.
  - For example, Steuben County could have a higher bag limit based on population data, but we have observed from experience that hunters will not use additional antlerless deer bag limit even if it is available. We have seen in the past where hunters will

decrease their personal harvest if they believe the county bag limit is too high. Therefore, we designated a county bag limit of 3 for Steuben rather than a 4 or 5, even though the population would support a higher bag limit.

- We made minor changes to try to keep the counties similar within Deer Management Units.
- Currently, Franklin and Fayette County have a low county bag limit to offset the effects of EHD. We are proposing that the county bag limit be a 1 in 2024 and then automatically go to a 2 in 2025. We will continue to review the data for these counties over time and make changes to get them to their target county bag limit of 3 for Fayette County and 4 for Franklin County.

Proposed county bag limits were shared with District Wildlife biologists for review and Fish and Wildlife and Law Enforcement leadership for review and approval.

# **Proposed County Bonus Antlerless Bag Limits**

