

How to Prevent/Mitigate Damage Caused by Deer

While white-tailed deer are highly valued by Michigan residents, conflicts between deer and humans occur at various levels of intensity across the State. Damage to agricultural and horticultural crops, suppressed forest regeneration, high rates of deer-vehicle collisions, and destruction of landscaping and other property by deer in urban/suburban areas can be significant. People engaged in these conflicts frequently request assistance from the DNR and these conflicts must be considered when deer management decisions and policies are developed. While the DNR attempts to minimize deer-human conflicts by managing deer numbers at appropriate levels through recreational hunting, development and implementation of new strategies will be necessary to successfully manage deer numbers in areas where hunting has not been effective.

The DNR attempts to minimize deer damage to crops and ornamental plants through a variety of tools including: [fencing](#), [hunting](#), [repellants](#) and [scare tactics](#). Non-lethal methods that are frequently recommended to landowners by DNR staff include the use of fencing, repellents, habitat alterations, and dogs. These methods have shown some short-term effectiveness, but can be expensive and labor-intensive. Regulated shooting of deer in conjunction with non-lethal methods has generally been the most effective strategy.

Fencing

Fencing is the most effective long-term solution to deer damage. The basics of fencing apply to both electric and non-electric fencing.

Deer are capable of jumping a ten foot fence, but in most circumstances they will choose another option. Typically, they prefer to go under or through a fence rather than jump it. For this reason, the bottom wire of an electric fence should be no more than 10 to 12 inches off the ground and non-electric fences should either have an even lower bottom wire (about 6 inches) or be of mesh construction.

Fence maintenance is critical in both applications. If a tree falls on the fence or a hole is cut in the fence, the fence should be repaired immediately. Once deer have gotten inside and discovered the crop, it will be harder to keep them out, even with an electric fence. No gaps should exist in the fence; access must be provided through gates that are closed at all times.

Fences should have a clear perimeter, at least 5 to 6 feet on the outside of the fence. This way deer must cross an opening to get to the fence which also increases visibility of the fence to the deer. If the fence is along a wooded edge deer may actually run into it on accident and may damage or take down sections of a fence simply because they do not see it well. This is important to keep in mind with smooth wire designs. Having a clear border increases the effectiveness of the fence and aids in maintenance. If you have no other choice than to have the fence in a place that may be difficult for deer to detect it is best to put flagging along the fence or any material to increase visibility and awareness the fence is there.

Electric fencing

Electric fencing need not be a tremendously costly remedy to deer damage. Many small fields can be protected by portable units that can be put up and taken down in half a day. Larger farms and orchards may want to invest in permanent fences, but even here costs can be reduced by using solar chargers and having clear perimeters.

For fields of a few acres or less, portable fences either of regular electric wire or a product called "Hot Tape" will provide relief from deer. Hot tape is a wide, colored tape with several wires embedded inside. It enhances protection by being visible to deer, even at night, while providing an electric shock on contact.

As few as two strands of electric wire can be used to protect crops if it is put up immediately after planting, it is baited initially (explanation to follow), it is always "hot", and is maintained properly (e.g., do not let weeds or grass grow up into the fence). The effect that being shocked by an electric fence has on deer behavior and their subsequent avoidance of the fence allows a landowner to use a lower fence than in the non-electric case.

Baiting the fence is quite simple but enhances the deterrent powers dramatically. Deer are extremely well-insulated over most of their body with fur. Couple that with their tendency to go under or through a fence, where they are most likely to contact the fence with their back or neck and it is easy to see how deer can penetrate an electric fence and not be shocked badly.

Baiting the fence, usually with a metal tab smeared with peanut butter, will make the deer contact the fence with its nose and tongue, wet parts that conduct electricity well. This first contact and resulting shock on sensitive parts will educate deer to respect the fence for quite some time. Obviously, the fence must be off to apply the tabs and bait, but turn it on immediately upon finishing. Space the tabs about 30 feet apart and keep the fence baited for several weeks after the fence is installed. When the deer become acquainted with the fence the baits can be removed if desired. However, deer will occasionally test a fence that has shocked them and new deer may enter the area, so keeping the fence baited is not a bad idea.

Most important is to keep the fence hot at all times. Deer will try to go under or through the fence, thus keep the bottom wire 10 to 12 inches above the ground. In a two-wire fence, the second wire can be at a height of 30 to 36 inches above the ground. A three-wire fence can have strands at 12, 24, and 40 inches. Keep in mind adult deer are about 36 inches at the shoulder. Fence posts do not need to be as stout as with the non-electric fence. Fiberglass posts driven into the ground at 30 to 40 foot intervals, close enough to keep the fence from sagging are adequate. It is the electric shock that provides the deterrent here, not the strength of the fence. Electric fence supplies can be found at farm supply centers or through fencing specialty companies.

Hunting

Hunting is the most effective method to decrease crop damage by deer. Using out-of-season shooting permits for immediate damage or using deer management assistance permits and allowing fellow hunters onto your property to assist you with population control are both good options.

Out-of-Season Shooting Permits

These permits are issued for agricultural or horticultural damage only and only in cases of properties experiencing high crop damage losses outside of normal deer hunting seasons. They are only valid outside of a deer hunting season and within a specified time period determined by the local wildlife biologist. In order to obtain them you must contact your local wildlife office. The local biologist may require a site visit prior to issuance of kill tags in order to assess extent of damage. Individuals who utilize these permits may keep the harvested deer or donate it, but above all, the carcass must not go to waste.

Deer Management Assistance Permits (DMAPs)

These permits are typically issued only for agricultural or horticultural damage and unlike the out of season permits, DMAPs are only valid during a deer hunting season. These permits are valid for antlerless deer and with the intended purpose of helping individuals mitigate future crop damage by decreasing the population on their property. In order to obtain them you must contact your local wildlife office. The local biologist may require a site visit prior to issuance of kill tags in order to assess extent of damage. Individuals who utilize these permits may keep the harvested deer or donate it, but above all, the carcass must not go to waste.

Repellents

While the following repellents have been successful in many instances, it is important to realize they may not always work in your situation. Testing them out at various times of the year and using multiple methods together (multiple repellents, hunting and fencing, etc.) will always be the best course of action.

Liquid Fence

Liquid fence, when applied regularly, can be very effective. It is recommended that you coat the entire area as much as possible. For larger areas coat the first 8-10 feet on any side. It is important to find repellents that can be administered on the crop that are safe for human consumption. One downside to liquid fence is that it is ineffective when it rains, so it must be reapplied following any rain.

Blood Meal

Bags of blood meal hung from the area being damaged or an area that may be potentially damaged have proven effective in some instances. These are used more often in orchards. Bags of blood meal should be hung no more than three feet apart and should be replaced as needed.

Human Hair

Suspending bags of hair from the area experiencing damage may help to deter deer from the area. Placing the hair in fine mesh bags will help to permeate the smell, thus making it a stronger scent for the deer to detect. Bags should be hung no more than three feet apart beginning in the spring and replaced monthly.

If possible, protect the hair from weathering by encasing it in a plastic container with the bottom of the container cut off.

Soap Bars

This method has been most successful in orchards where the bars can easily be hung from the trees. Drill a hole in the soap bar and using string suspend them from a tree. The bars should be placed no more than three feet apart. One bonus to this method is that weathering will actually increase the effectiveness of the soap. Replace them as needed.

Scare Tactics

Scare tactics are typically only initially effective because deer become habituated to this. Over time using scare tactics alone will be very ineffective.

Bird Screamers and Bird Bangers

Siren screamers can be very effective scare tactics. Much like you may expect, when fired, they have a high screaming sound that tends to scare deer away. Siren screamers and the device to fire them may be obtained at your local DNR wildlife office. Pairing this with other tactics will help keep deer away. Using only siren screamers may not be as effective since the deer may become habituated to the screamers, thus losing their effectiveness.

Flagging

Flagging with larger strands and other objects such as milk jugs along your fence can work initially. However, deer become habituated to this and it is no longer effective.

Noise Makers

Much like siren screamers any type of noise-maker is usually effective in the beginning. After time though, deer may become habituated to the noise, thus losing the effectiveness. For this reason it is important to use multiple methods at various times of the day. This way, the deer are not given the opportunity to become acclimated to the situation.