

Tips for On-Farm Equipment, Metal and Livestock Protection From Theft

Sammy Sadaka,
Ph.D., P.E.
Associate Professor -
Extension Engineer

Introduction

According to a Farm Bureau report, agriculture is the largest industry in Arkansas, adding around \$16 billion to the state's economy every year. The Natural State is a major exporter of rice, soybeans, cotton, poultry and feed grains. Arkansas' cattle inventory surpasses 1.7 million head. Additionally, the state produces more than 1.8 million pigs annually. These activities take place on more than 49,000 farms, with about 97 percent of these farms being family-owned. The average Arkansas farm has equipment valued at about \$91,000. In total, Arkansas producers own about \$4.5 billion worth of equipment. In some instances, crimes such as equipment, metal or livestock theft significantly affect farm owners.

These forms of criminal activities, i.e., agricultural crimes, are serious problems that have substantial financial consequences for farmers, ranchers and farm owners across the state and the nation. The National Criminal Justice Reference Service stated that theft and other agricultural criminal activities result in an estimated loss of about \$5 billion every year across the country. Stealing metal from the farm has become a major issue across the nation. These metals include copper, brass, bronze, stainless steel or aluminum components that are being sold as scrap. The theft of equipment and metals may result in the loss of livestock or the destruction of crops that need irrigation. Additionally, the

damage and loss of large or small equipment may lead to a year when the farm does not turn a profit.

The expenses are significant for farmers when stolen equipment must be replaced. A total loss of productivity might unfortunately occur if the theft happens during a critical time, such as during planting or harvest seasons. Accordingly, producers, ranch owners and farmers are looking for ways to protect their assets. This fact sheet aims to provide some tips and guidance that might help producers and farmers protect their equipment, metal and livestock from theft. It should be mentioned that not all of the tips provided may apply to a particular farm. Producers should select and install what works for them.

Change From Reactive to Proactive to Protect Your Assets

Farmers and producers faced with criminal activities, such as stolen equipment, metal or livestock, are usually overwhelmed by the negative consequences. Below are some tips that might help them be proactive and protect their assets rather than being reactive to the stolen properties.

- Add gates (see Figure 1 inside) to the entrance of access roads, or install cables stretched between supported poles paved to the ground.
- Fortify gate hinges to make it hard to remove them.

*Arkansas Is
Our Campus*

Visit our web site at:
<https://www.uaex.uada.edu>



Figure 1. A farm gate

- Secure gates with high-quality chains and locks. Gates can be topped with strands of barbed wire.
- Cover hasp bolts by welding a metal sheet to protect padlocks from being cut. Secure storage areas with padlocks, hasps and deadbolts.
- Install video surveillance systems such as cameras (see Figure 2), monitors and recorders. Preferably, integrate them with recognition devices, e.g., motion sensors that trigger an alarm and activate the video recorder and a light. Place them in hidden places and in areas where break-ins are likely.
- Use a high-resolution camera/video system for clear images.



Figure 2. A security camera

- Install cameras and alarm systems that can be synchronized with a smart phone for activation on or off site. Check out the current technology for wireless monitoring and alarms with motion sensors.
- Install laser trippers and infrared cameras if possible (these are relatively new technologies).
- Install lights in critical areas close to fuel tanks, grain bins and buildings. Place motion sensor lighting around the perimeter of shops and out-buildings to spotlight thieves. Keep outside lights on ambient light sensors. Cut hedging that blocks light sources.

- Use solar-powered floodlights with motion sensors. These could be used near entrances or where equipment is located.
- Post signs at the entrance of the field showing that the premises are protected by a security system, cameras and identity marking.

Prevent Farm Equipment and Metal From Theft

Farmers and producers often leave farm equipment in the field overnight during their busy times of the year. Accordingly, they need to follow some simple tips that might help protect their equipment and metal from theft:

- Keep equipment and irrigation pipes in a fenced staging area as shown in Figure 3.



Figure 3. A farm fence

- Position equipment to be visible from your house or a neighbor's house.
- Store equipment behind a hill or trees out of sight from the road.
- Park equipment away from the easy access road.
- Place equipment and irrigation piping away from the sight of public roads.
- Disable equipment you will keep overnight by:
 - Removing the distributor cap, rotor or battery.
 - Mounting a second ignition switch in a hidden location.
 - Using a chain to tie the front and rear wheels of equipment together.
 - Chaining pieces of equipment to each other, a tree or other strongly anchored object.
 - Chaining vehicle and equipment steering wheels so the vehicle cannot be turned in any direction.
- Remove the keys from tractors or equipment.
- Return equipment and irrigation components to their safe location if you will not use them shortly.

- Return equipment to the main farm yard area when there is a breakdown, if possible.
- Store large farm machinery in a secured shed while not in use.
- Lock the doors of the machinery storage shed if possible.
- Build a fenced enclosure and padlock it shut for stationary equipment if you cannot store them in a secure shed.
- Lock your tack rooms and saddle compartments.
- Paint your property with a specific color or a combination of colors to help investigators identify your property once it is recovered.
- Assign an identification number to each piece of farm equipment. Maintain the identification number in a standard location on the equipment.
- Place your driver's license number on your equipment.
- Advertise that you ID-tagged your equipment to keep thieves away.
- Tag ID numbers on long sections of pipe, expensive valves, engines, fans, fixed equipment as well as on moveable farm equipment.
- Know where your equipment is at all the times.
- Maintain a regular inventory list (and photos) of all equipment.
- Use a frequent, but time-varying, schedule to inventory your equipment.
- Check your irrigation equipment frequently and randomly to ensure that it is in place.
- Take photographs and videotapes of machinery and valuable items of equipment – store images on the cloud or in a safe place.
- Keep smaller tools in an arranged and well-ordered storage area. Any piece of material missing from its location will alert the farmer about potential theft.
- Secure tools and toolboxes.
- Report suspicious activity immediately to the police.

Potential Technique of Identification Numbers

Producers may create an identification number (if you do not have one) for their equipment that consists of at least 12 letters and figures. These letters and figures may contain two letters for the state, three letters for the county and the rest for the person to whom the equipment belongs. For example, equipment owned by a producer of Pulaski County, Arkansas, would be identified as AR-PUL-6712298.

The letters AR designate the State of Arkansas, the letters PUL designate Pulaski County in Arkansas, and the numbers 6712298 designate the identity of the farmer in Pulaski County to be listed in the sheriff's office.

Prevent Hay Bales and Grain From Theft

Hay and grain are vulnerable to theft. However, identification numbers could be printed on tabs of paper 3/8-inch wide and 3/4-inch long and then mixed with hay during the baling process or with grain during the augering process. These papers serve as warning signs that might deter the potential thief from stealing hay or grain. This can also be effective in tracing stolen hay or grain. It should be mentioned that animals could safely consume the used paper and the ink without harm. If humans are to consume the grain, identification papers can easily be removed during processing.

Prevent Livestock From Theft

- Identify livestock (see Figure 4) through ear notching, branding or tattooing. These methods are difficult to alter, and the thief may be hesitant to take marked livestock.



Figure 4. Livestock

- Build pens away from roadways, but make sure these pens are not in isolated spots. It should be mentioned that your pens should be in your line of sight. Livestock pens that are built far from busy roadways may be safer than the ones built too close to busy roads.
- Check livestock at random times. Following an irregular routine may help avoid theft. It has been reported that livestock and equipment thieves usually monitor producers' activity and steal when they know that producers are busy or away from the farm.

- Participate in neighborhood watch programs. Help your neighbors as they will help you. Create a farm watch program with your neighbors to keep an eye on all the properties. Thieves will be more afraid to steal from anyone in the group if they know that team members will help each other monitor the facilities.
- Add signs to roads leading to field entrances stating participation in the neighborhood watch.
- Count your livestock regularly and make sure your inventory list is up to date.

Summary

This fact sheet provides several tips that may help prevent equipment, metal and livestock theft. Following these tips might contribute to reducing the opportunity for theft. These tips are worthwhile if they can protect producers' assets. Unfortunately, several of these tips may be time-consuming and expensive. Individual producers are the best judges of what is worth spending their time, investment and trouble on in their specific situation. Creating a

neighborhood watch program could help the rural community. Simply, if neighbors are assisting neighbors, thieves will learn they are being monitored. They recognize that there is a high chance of being caught. With some prior planning and implementation, some theft may be avoided, reducing the financial loss and the logistical headaches that come with these losses. Thieves may often be deterred or turned away by clear warnings that the owner is aggressively protecting the premises.

Other Resources

- Daniel P. Mears. A Process and Impact Evaluation of the Agricultural Crime, Technology, Information and Operations Network (ACTION) Program.
- Tom Jones. Metal Theft Prevention for Farmers.
- Gary Holland. Rural Crime Prevention: Farm Security Techniques.
- Facts. Arkansas Farm Bureau.
<http://www.arfb.com/pages/education/ag-facts/>