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EARLY GROWTH CROP DAMAGE RECOGNITION

WILDLIFE SPECIES CAUSING DAMAGE: Squirrel
CROP: Corn seedlings

DESCRIPTIONS: Picture **1A** shows damage caused by squirrels digging at the base of corn seedlings to get to the seed. Holes are 1- 1 1/2" wide and the dirt is pulled in one direction. The hole may have a slight fan shape getting wider towards the back. The hole is generally 2-4 inches in length. If fresh damage is found, the seedling will be lying next to the hole and the germ of the seed is eaten. Crows or other wildlife may carry off the remaining cotyledon of the uneaten seed soon after the squirrel leaves. The pattern is to move down a row, one seedling at a time. Squirrels may also smell and dig up seeds before the seedling emerges. Not planting right next to the timber mayhelp. Hunting pressure may help reduce this type of damage. This type of damage is usually minimal.

WILDLIFE SPECIES CAUSING DAMAGE: Ground squirrels
CROP: Corn seedlings

DESCRIPTION: The damage caused by smaller rodents is typically similar to the squirrel damage. The hole may be smaller and 'neater **(2A)**. This type of damage can be associated with colonies and are usually near an associated grassy area. This damage usually is focused in one small area at a time, but different visits (areas) in the field could be near the edge or 10-50 yards from the edge. This may leave small areas with no plants, giving the impression of equipment problems if only noticed later in the growing season.

This type of damage has mistakenly been attributed to turkeys. A common scenario for turkey complaints: A landowner has scene a flock of turkeys using his harvested row crop field during the winter months. The flock habitually visits this field into the spring months. Some birds may break off and return to other areas but many of the birds show up there at some point in the day. Light field work begins and the field gets planted. Some of the birds continue to use this field having found waste grain there all winter and as soil temperatures warm invertebrates also become plentiful. The large turkeys are visible and get blamed for anything amiss while the actual culprits are not readily seen.

A turkeys method of scratching for food has evolved in timbered areas where the prize nuts lay just under the forest floors litter. This layer is relatively easy to move and digging deep is not the objective. They also usually cover a larger fan-shaped area which increase the likelihood of uncovering any food. They do not probe for food with their beak to obtain food which would be the only way such a small hole could be created by a turkey.

EARLY GROWTH
CROP DAMAGE RECOGNITION

WILDLIFE SPECIES CAUSING DAMAGE: Pheasants
CROP: Corn seedlings

DESCRIPTIONS: Picture **3A** shows damage caused by pheasants. A large number of birds over-wintered in the switch grass field adjacent to this corn field. This is an infrequent problem seen in special circumstances: **(1)** no hunting or limited hunting, **(2)** large blocks of winter habitat, and **(3)** excellent overall pheasant habitat. Pheasants like to eat the planted seeds, like small mammals. The birds will do some scratching adjacent to the plant and in wetter or loose soils, the seedling may be easily dislodged with minimal scratching. They may pull up the plant in an attempt to get to the seed underground. This is a problem only when the plant is very small and is only significant when large concentrations of pheasants are present.

Tracks are the best indicator of what is causing the damage.

Habitat surrounding the area should help determine animal species involved. Other animals causing similar looking damage are: crows, squirrels and other small rodents.

As seen in picture **4A** this type of damage is found next to the field edge, next to roosting cover which also over wintered a large concentration of pheasants.

EARLY GROWTH
CROP DAMAGE RECOGNITION

WILDLIFE SPECIES CAUSING DAMAGE: Deer
CROP: Corn plants

DESCRIPTION: During growth, deer will move down a row taking the terminal growing leaf out of the plant, biting off the tender base **(5A)**. They will then move to the next plant and do the same. Growth of the plant may be severely set back, depending on the consistency of this type of browsing. The majority of the uneaten leaf will be seen lying in the row near the plant it was pulled out of.

WILDLIFE SPECIES CAUSING DAMAGE: Deer
CROP: Soybeans

DESCRIPTION: During growth, deer will move down a row browsing on the new leaves **(6A)**. Growth of the plant can be severely set back, depending on the consistency of this type of browsing. While not common, if browsed very early (1-2 inches tall) it can kill the plant. Browsed beans will typically add additional stems, getting 'bushy'. Lightly or moderately browsed beans may produce as many bean pods per plant but they are generally lower to the ground on these bushy plants. Extremely young plants (less than 6-8 leaves), are generally not browsed by deer. At this time of year there is generally other abundant sources of food available.

MID-TERM GROWTH
CROP DAMAGE RECOGNITION

WILDIFE SPECIES CAUSING DAMAGE: Deer
CROP: Corn

DESCRIPTION: The short nature of these plants **(1B)** was caused by early browse on the terminal leaf of the plant as seen on the Early-growth damage page. These plants are continuing to put on new growth as newly emerging leaves can be seen growing up past previously browsed leaves. The original potential of the plant has probably been lost as extra energy is put into stem and leaf growth.

WILDLIFE SPECIES CAUSING DAMAGE: Deer
CROP: Corn

DESCRIPTION: Picture **2B** shows an ear that has been bitten off early in development. The inner portion of the ear continues to grow leaving behind older, damaged portions of husk. An ear effected this way will be smaller than normal and kernel development may be greatly reduced or eliminated. The terminal portion of the plant was also obviously browsed earlier in development.

DESCRIPTION: **3B** shows the overall effect of continuous deer browse in a corn field adjacent to an under harvested deer herd. Notice older, more mature leaves are not palatable and are generally left alone. Plants in the forefront were browsed early and are only about waist high. Note no plants are knocked over as would be seen with raccoon damage.

WILDLIFE SPECIES CAUSING DAMAGE: Deer
CROP: Soybeans

DESCRIPTION: As summer moves on, native plant species that were more succulent earlier become more matureand less desirable **(4B)**. Also, as the bean plants become more developed, it becomes more 'efficient' for deer to browse in a bean field where emerging young leaves are more abundant. During growth, deer will move down a row browsing on the new leaves. Growth of the plant may be severely set back, depending on the consistency of this type of browsing. Browsed beans will typically add additional stems, getting 'bushy'. Lightly or moderately browsed beans may produce nearly as many bean pods per plant but they are generally lower to the ground on these bushy plants.

MID-TERM GROWTH
CROP DAMAGE RECOGNITION

WILDLIFE SPECIES CAUSING DAMAGE: Deer
CROP: Beans

DESCRIPTION: Again, browse on bean plants is limited to the newly emerging leaves on the top of the plant **(5B)**.

WILDLIFE SPECIES CAUSING DAMAGE: Deer
CROP: Soybeans

DESCRIPTION: **6B** shows the potential difference in plant growth when deer were prohibited from browsing a small fenced area in the center of this 7 acre field. Plants outside the fence were less then 16" tall. Inside the fence the plants were 26-30" tall.

WILDLIFE SPECIES CAUSING DAMAGE: Raccoons
CROP: Corn

DESCRIPTION: If an ear can be reached from the ground, a raccoon will peel back the husk to expose the tender kernels **(7B)**. This is generally done during the milk stage. Unlike bird damage (seen on the following pages), 1/2 or more of the ear may be exposed and the kernels eaten along the length of the ear. Frequently ears are pulled off the stalk and eaten on the ground. Husks have been peeled back in rather thin strips.

DESCRIPTION: During the milk stage in corn, raccoons will try to climb the stalk to reach the ears. Generally, their weight is too great and the stalk will break off 18-24" above the ground **(8B)**. A family of raccoons over a period of several nights can lay down a fairly large area of corn.

MID-TERM GROWTH
CROP DAMAGE RECOGNITION

WILDLIFE SPECIES CAUSING DAMAGE: Raccoons
CROP: Corn

DESCRIPTION: As seen in image **9B**, fairly large areas of corn fields adjacent to wooded areas and especially along water courses, can be impacted by raccoons. While the corn in the bottom pictures appears to be quite mature, this damage occurred earlier when the corn was in the milk stage and the plants were still green. This was not caused by two bucks fighting or turkeys flying down the rows!

WILDLIFE SPECIES CAUSING DAMAGE: Birds
CROP: Corn plants

DESCRIPTION: The shredded appearance of the husk and silk area of an ear **(10B)** is evidence of birds peeling back the husk only at the very tip of the cob. The shredded husk is generally in thin ribbon like pieces and will only be exposed 1-3 inches down from the top of the ear.

MID-TERM GROWTH
CROP DAMAGE RECOGNITION

WILDLIFE SPECIES CAUSING DAMAGE: Birds
CROP: Corn

DESCRIPTION: This type of bird damage **(11B)** in itself is usually minimal but consequential smut or disease may be more significant.

WILDLIFE SPECIES CAUSING DAMAGE: Birds
CROP: Corn

DESCRIPTION: Bird damage on a large scale is generally limited to a field or two and occurs in late July and August when birds come from roost sites in large concentrations **(12B)**. If not harassed, they will return to the same field(s).

MATURE GROWTH
CROP DAMAGE RECOGNITION

WILDLIFE SPECIES CAUSING DAMAGE: Deer
CROP: Corn

DESCRIPTION: After ear development, deer will work their nose inside a husk and eat the kernels off an erect ear **(1C)**. Occasionally they will bite off the end of the ear as well. Occasionally an entire ear can be eaten and the husks will be remain intact on the stalk.

WILDLIFE SPECIES CAUSING DAMAGE: Squirrels
CROP: Corn

DESCRIPTION: Squirrels as well as other small mammals and birds will remove one kernel at a time from an ear that can be reached **(2C)**. They will then chew the germ end out of the kernel and drop the rest. Remaining portion of kernel may eventually be eaten by something else.

WILDLIFE SPECIES CAUSING DAMAGE: Deer
CROP: Winter wheat

DESCRIPTION: A relatively insignificant but noticeable effect of deer is a path created through wheat field adjacent to a large, un-hunted timber **(3C)**.

WILDLIFE SPECIES CAUSING DAMAGE: Beaver
CROP: Corn

DESCRIPTION: Stalks will be cut at a 45 degree angle, close to the ground. Located near a water source and slide area where cut stalks are drug into the water are readily found **(4C)**.