Aviagen™ Turkeys

Bulletin

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Grade - The Ultimate Group Project

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Many of us have good and possibly not-so-great memories of working on group projects back in school. Regardless of how well you did your task, the grade given by the instructor reflected the efforts and execution of each member of the group. One group member failing in their task resulted in a lower overall grade for everyone.

In many ways the final poultry grade for any flock is the result of the effort and success of everyone involved in bringing that flock to market. This includes the hatchery, nutritionists, feed mills, veterinary services, growers/live production, livehaul crews, truck drivers and every single person on the production line in the processing plant. Any team member not succeeding results in fewer Grade A birds passed on to the next teammate in the process.

Even though most of the turkeys produced in the US are not sold as whole birds, many companies use grade as a barometer of production efficiency as well as quality of production. Minimal downgrading is a good indicator that all systems are functioning well from the farm through the processing plant. It also creates the potential for higher yields, lower parts condemnation and more efficient processing through evisceration and deboning.

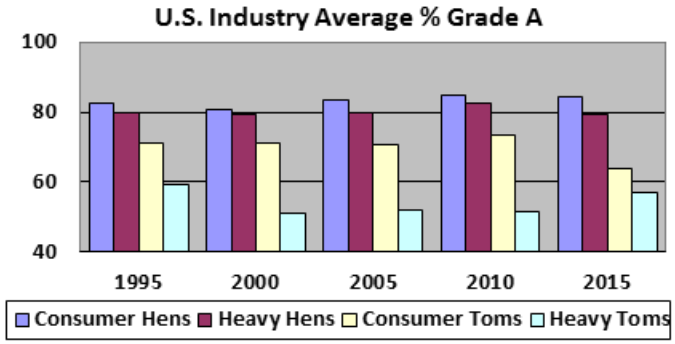
What is Grade?

Most frequently "Grade" reflects the percent of birds achieving the highest standard, Grade A, of the USDA criteria for carcass to sell to our customers. Grade can be considered as having two components: parts condemned (trim) and beauty contest. As birds are inspected at the processing plant, all portions that are bruised, diseased, or contaminated are removed from the carcass and condemned. This can also include defects such as scabs, sores, broken bones and mutilation from processing equipment. With the exception of the wing tips and tail, removal of any other part from the carcass usually results in the bird no longer qualified as Grade A.

The second part of Grade is the beauty contest and is the ability to meet quality standards based on aesthetic tolerances rather than wholesomeness. These types of standards evaluate items such as discolorations, exposed flesh, skin tears, and feathers. The standards or definition of Grade A are often from government regulation, but some companies choose to define their own standards, which must exceed those of the government.

What is a Good Grade?

Current U.S. Industry trends show an average 84% Grade A for consumer hens (under 19 lbs) and 79% for heavy hens. Tom Grade A generally runs lower with an average 57% in both the consumer and heavy classes. In Canada, average Grade A in 2015 for small hens was 76%, 77% for hens and 49% for toms.



B.U.T. Nicholas

"Average" performance is not a lofty goal, as it can be interpreted as the best of the worst half or the worst of the best half. The top performing plants in the last year exceeded 88%, 87% and 75% for consumer hens, heavy hens, and toms, respectively. The top performing Canadian plants last year were near 90% for small hens (< 14 lb).

Are Grades Improving?

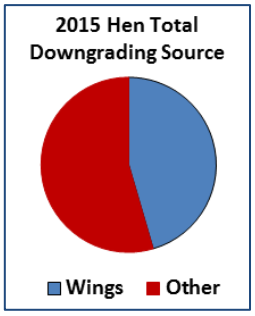
The majority of turkeys processed in the U.S. fall into the consumer hen and heavy tom categories. Industry Average Grade A for both groups has increased from ten years ago. Many of the participants in the group project of producing Grade A turkeys have played a part in this improvement. Primary breeders have addressed and made some progress on grade related issues such as pendulous crops and breast blisters.

Animal welfare programs and a higher level of management have also been a driving force helping improve grades. Most animal welfare programs will routinely evaluate broken bones, cuts and bruising. Proper practices and handling procedures that have been implemented on the farm, during livehaul and unloading in the plant, as well as the increased awareness and accountability have helped lower downgrading.

Technology has been a component in heavy tom Grade A improving to the highest it has been since 2000. Advances in loaders have lowered downgrading related to putting turkeys on the trailers and controlled atmospheric stunning has helped reduce carcass defects related to live hanging and electrical stunning in the processing plant.

How Do I Help the Group?

How you help Grade depends on your role in the group. Most downgrading happens within the final two weeks before slaughter, and for hens 2/3 of all downgrading occurs in the final 24 hours. The number one reason for hen downgrading is related to bruised or broken wings.

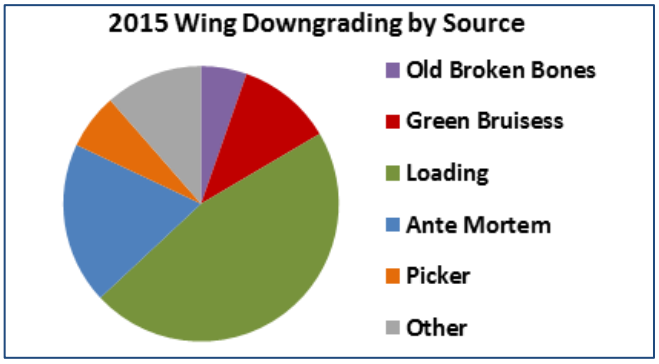


A major part of controlling hen downgrading is controlling wing activity. Where there's smoke, there's fire. Where there's wing flapping, there's likely going to be bruising and downgrading. On the farm, the majority of wing downgrades are green bruises, which are generally a reflection of bird activity within the last two weeks before processing. Activity in the barn must be limited in the final weeks. Care must be taken when walking through the barn. Many will discontinue tilling the final two weeks in order to prevent bruises.

Wing bruises or breaks from loading activities is the number one reason for hen downgrading in both U.S. and Canada. Hand catching is a common technique for Canadian hen and small hen producers and consistently results in lower wing damage than when a mechanical loader is used. Care must be taken in driving birds to the loader in order to prevent birds from flapping their wings and striking the panels in the pen, other birds or the top of the loader. Loading birds at night is often advantageous and can result in 2-2.5% less wing downgrading than loading in daylight.

While the category of "loading wing bruises and breaks" is the overall number one cause of wing downgrading, bruises and breaks occurring while birds are being shackled or on the line prior to slaughter are the primary source of downgrading that occurs in the processing plant.

Bruises and bone breaks from wing flapping on the farm often only occurs if the birds strike a stationary object such as feed lines, waterers, sidewalls or other birds. In the plant, every bird on the line has an adjacent bird to strike that is only inches away. Proper shackling

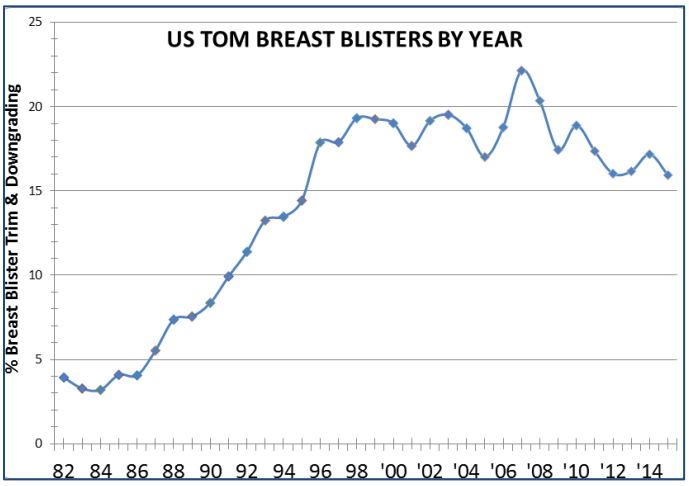


techniques are critical in reducing plant wing downgrading as is any other means to keep the birds quiet and calm, such a subdued lighting, breast rubs, a smooth monorail, and proper and effective stunning practices.

How About Toms?

Developed sternal bursas, often called "breast blisters" have been the number one cause of tom downgrading since they averaged 3.46% back in 1982. Average live weight for toms that year was slightly over 24 lb at 126 days. Since that year age and weight have increased and so have breast blisters.

Weight is not the only factor influencing breast blisters. In the last several years, breast blisters have been lower on some of the heavier flocks. Litter management and nutrition are very important in controlling breast blister downgrading. More than any other defect, breast blisters are influenced by season with August and September being the peak months in North America.



What Tools Can I Use?

Regardless of whether you are a farm manager, a member of the catching crew or a live hanger in the plant your ability to manage the amount of downgrading you contribute is easier once you can measure it. A comprehensive and reliable system to measure the downgrading profile is essential. It must be more than able to evaluate the total amount of downgrading, it must also be able to differentiate by source. For example, the system must measure the amount of wing downgrades, and also be able to differentiate levels of broken or bruised wings from the farm, livehaul, shackling, stunning, and in the plant.

The measurement system must not only inform you of how much downgrading is currently under your control but also provide feedback when you vary the inputs. For example, the grower and hatchery need to understand the change in scratch and cuts downgrading when they decide to remove toenails. The catching crew needs to be able to evaluate improvements in bruising and broken bones for the different type of loaders. The measurement system will also help you to communicate with the other functional areas using data rather than subjective opinions. In most situations the measurement system evaluates birds in the plant and records the reason for downgrading as the bird is inspected, trimmed, or sorted. With the feathers removed, the bird can be read like an open book.

Participate In Your Group Project

High grades are achieved by properly executing many small details. Every person who comes in contact with that bird needs to carry out those details to share the success of that flock. Communication to the other members of this group project is important. Growers, crews, service techs or hangers may have ideas on how to help lower the total downgrading. If you haven't visited the processing plant lately, consider making the trip. Ask questions, review the results, especially the downgrading you can influence, and create an action plan for the next flock.

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