



GAMEBIRDEXPERT.COM

Day to Day Issues Facing a Commercial Gamebird Farm

Keeping Humidity Down

Humidity can be a problem in our barns. Humidity can create wet bedding, or litter. Wet litter creates ammonia, which is bad for the birds' eyes, and is also an optimum condition for parasites like coccidiosis, bacteria like E. coli, and virus' such as reovirus. Flies and other insects are more attracted to wet litter as well. These effects of humidity need to be eliminated, and here's how we do it



Humidity comes from many different sources; Humid outside air can filter into the barns, water that leaks through the walls and roof of the barns, spills/leaks from the water system, and even the exhaling of the birds are all sources that need to be considered. The barns are continually heated and when you add water to that heat it will evaporate causing the air to become humid. Humidity, especially when it increases from one location to another, can be easy to detect. Natural forms of detection, fogged glasses and smelling dampness, can be as effective as technology but not substituted for it. We use a humidity detection device called a Hydro-thermometer (Thermo Hygrometer) that instantly measures humidity levels. This keeps our records accurate and our levels appropriate.

In order to keep the humidity down in the barns we use a few different strategies. The key tactic we use is simply to keep the buildings ventilated. Our ventilation system runs in tandem with our heating system and its intensity depends on the chicks. The temperature of a room is dictated by the age of the birds in it and we keep our ventilation fans set to keep the temperatures desirable for the birds. Keeping the air moving is very important- replacing the humid barn air with fresh outside air. This becomes difficult when the air outside is equally or more humid than in the barns. Along with the exhaust fans we use "jet sock" fans that keep the air circulating, cutting down on standing humidity. If a barn does not have a "jet sock" fan there is a stir fan to keep the air moving. Diligence is important when working with the humidity fans to keep them working accurately.

If the bedding does become wet for any reason, we remove the bedding as soon as possible to dry and re-bed the area. In order to dry any wet spots from water leaks or an excess of humidity, which are common occurrences on our farm, we use a drying agent called "Mistral" that is sprinkled on the wet areas to absorb the moisture before it can create mold and breed dangerous bacteria. Mistral has performed impressively for us and we will often use it to powder the whole floor before putting down any bedding to make certain the floor is completely dry.

Humidity can be a risky factor when raising birds because of the dangerous bacteria and parasites it can cause, but we have found some really great ways to cut down and even eliminate its effects.

(Source information from Brian Davis)

- See more at: www.gamebirdexpert.com



Mistral® Sanitizing Powder

Mistral is a safe, natural sanitizing powder which aids in reducing moisture, ammonia and bacteria from livestock bedding material. When livestock, especially birds, stand in moist, soggy bedding their risk of disease is much higher. The dryer the environment, the healthier the environment.

Mistral is made of Montmorillite clay mined in France, seaweed concentrates, and specific essential oils uniquely processed together. This preferred clay is "micronized" to reduce the raw clay size to a very uniformly small, smooth, spherical particle. Seaweed components are



processed with the clay to increase the inter-clay layers, which improves moisture flow and binding sites within the clay. Essential oils are added for foot pad & hoof conditioning. The moisture reduction ("wicking") and binding of soluble uric acid and ammonia in the bedding are the major modes of action. Reducing fe-

cal bacterial concentrations is essential to reduce the ongoing release of ammonia from the uric acid excreted by the chicks and poults. Litter ammonia release is optimized in bedding containing more than 35% moisture.

Ammonia may not be detected (smelled) at a human's eye level, but ammonia and heat is being produced in damp bedding, especially around drinkers and feeders. These areas also create challenges for healthy foot pads, since ammonia is very caustic. Wet litter can be >9.0 pH.

Game bird managers may use Mistral® to further optimize sanitation by focusing the application to

wet caked litter around drinkers and feeders and/or blow into clean and disinfect and dry brooder setups. Also, applying to chronically damp areas (under building eaves, where condensation from water lines gathers, etc.), may help improve fly control. Essential oils can repel flies and the moisture "wicking" effect

can help minimize fly larva hatch in localized areas of application.

Usage rates will vary, depending upon conditions (humidity, ventilation, temperature, etc.). Observation & experience will show you where and how often to apply. As a general rule – begin application with no more than recommended rates (below), and apply as needed:



Application Rates

- 1.) Barn apply – rate = 15 lbs. per 1000 ft². (blow in barn with reversing leaf blower, after clean & disinfect).
- 2.) Drop spread – under / around drinkers and feeders @ 10 lbs. / 100 linear ft.
- 3.) Shaker bucket – customize a plastic 5 gal. bucket by drilling holes in bottom. Holds 15-20#.

Note that Mistral® is a moisture "wicking" agent. Moisture and ammonia that have already been released into environment still need to be ventilated out of the area. Additional use of fans may be used to optimize or focus on problem areas. ★



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Have your game bird management
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*A recent study showed that
women who carry a little extra
weight lived longer than the men
who mentioned it.*

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An unsharpened pencil
is pointless.*

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I tried to grab the fog once. I
mist.*

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Why is the third hand on the
watch called the second hand?*