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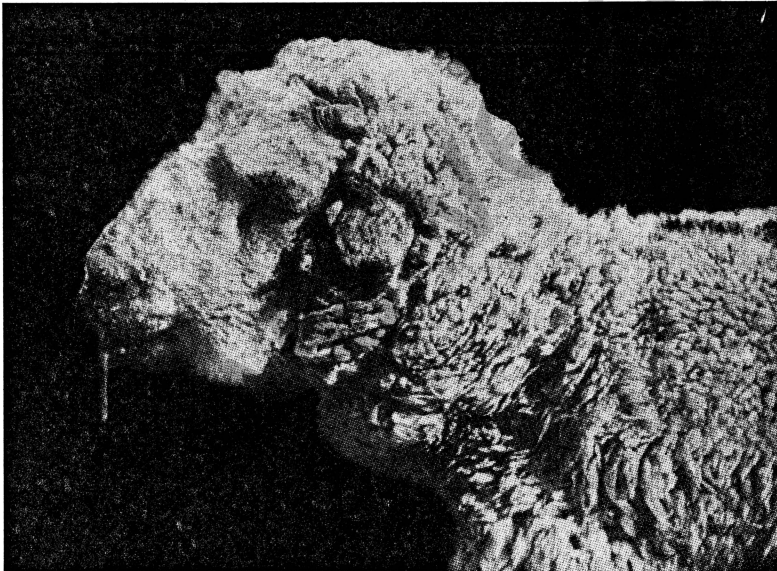
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## Bighead or Light Sensitization in Sheep and Lambs

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Typical appearance of sheep suffering from bighead or light sensitization. See description of symptoms on page 2. (Photograph through courtesy of the U. S. Department of Agriculture.)

Sheep owners in Missouri have reported a great deal of trouble from a disease that affects ewes and lambs during the summer months. The disease is commonly called bighead and is also sometimes called stubble-field disease. It is a non-contagious, non-infectious disease characterized by swellings of the ears, eyelids, face, and lips which are the parts of the head that are bare or lightly covered with wool.

The disease is thought to be caused by a combination of two factors, one of the factors being some weed or plant on the pasture that is

eaten by the animals, which causes a toxic material to be formed in the blood. This toxic substance is not harmful unless the animals are also exposed to intensely bright sunlight.

A great many sheep owners have resorted to vaccination as a means of curing or preventing the disease. There is no evidence to show that vaccination of flocks will cure affected animals or prevent the disease from developing in others. Effective control measures depend upon eliminating one or both of the factors that contribute to producing the disease.

### **SYMPTOMS AND LESIONS**

The first symptoms usually noticed by owners are that one or several animals are restless and are rubbing their heads on stationary objects or scratching their heads with their hind feet. In a short time the ears, eyelids, face, or lips begin to swell. The affected animals are usually running a high temperature of 105° to 108° F. The animals at this stage show extreme irritation and are continually rubbing their heads against some object. If the affected animals are moved into the shade or put in a barn out of the direct rays of the sun, the restlessness and extreme irritation usually subside at once.

In affected animals that are not protected from the direct rays of the sun the disease progresses rapidly. There is usually a discharge from the nose and a profuse flow of tears out over the lower eyelid. The swollen parts of the head are hot and painful and there is usually an oozing of serum out onto the surface. The serum dries forming a crust. The animal in its attempt to relieve the irritation by rubbing or scratching causes mechanical injury and some bleeding. The blood mixing with the yellow serum and then drying forms a brown or black crust over the surface.

The swellings usually are at their height in 24 to 48 hours after symptoms develop. In those animals that do not die, the skin of the ears, eyelids, and face may become leather-like and dry with cracking and sloughing. Sometimes there may be deep sloughing of the affected parts and in some animals the ears may slough off or dry up and curl. Flies may blow the affected parts of the ears or face and the areas become infested with maggots.

The affected animals usually show some jaundice or a yellow discoloration of the white part of the eyeball. In some affected flocks

the usual symptoms of swollen ears, eyelids, face, or lips do not appear and the only external symptoms that can be seen are the yellow discoloration of the eyes and the droopy dejected appearance of the animals. Post mortem examinations of animals that are affected with jaundice usually show that all the body fat and liver is yellow in color.

Sheep that are heavily infested with stomach worms often have a swelling develop underneath the lower jaw. This condition is commonly called bottle jaw and should not be mistaken for bighead.

### CONTROL

The treatment of affected flocks is largely one of management rather than administration of medicine. Affected flocks should be confined in a darkened barn and fed on a dry laxative feed such as bran, legume hay and plenty of fresh clean water. This method of management accomplishes two things; it prevents animals from eating the green plants that contain the toxic principle and it protects the animals from the direct rays of the sun. Affected animals that retain their appetites usually recover in five to ten days without any further treatment. A good many of the more seriously affected cases can be saved with a little care and nursing.

The application of soothing oil to the swollen parts of the head will help to control the irritation. Olive oil to which should be added a teaspoonful of lysol to the pint can be used. Adding the lysol is important as it helps to repel flies. Bathing the affected parts with a solution made by dissolving two pounds of Epsom salts in a gallon of water is effective in reducing the irritation.

Animals that are so badly affected they refuse to eat can often be saved by giving them warm milk and sorghum or Karo syrup. The amount of warm milk that should be given is a pint at a time four or five times a day. A half of a pint of sorghum or Karo syrup can be added to the milk morning and night the first day. If the bowels do not loosen up with a half a pint of syrup given twice the first day, the same amount can be given on the next day. If the bowels are loose the second day, the syrup should be cut down to an ounce or two in the morning and night feedings. The milk can be given with a dosing syringe or dosing bottle.

Animals that are affected with the disease usually have a severe constipation and it may be necessary to give repeated doses of Epsom

salts in addition to the syrup before normal bowel movements are restored. Three or four ounces can be given in a pint of water every morning for three or four mornings if necessary. Reestablishing normal bowel movements is very important in treating affected animals that are constipated.

Changing the pasture is always advisable. Confining the flock in a shed, barn or some other shaded area during mid-day may prevent the animals from coming down with the disease.

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