



# EYE PROBLEMS IN CATTLE

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During the summer of 1967, eye problems in cattle increased throughout the state. Probably one of the chief causes of eye problems was infectious pink-eye, spread by the face fly. Face fly was widespread in Idaho for the first time in 1967.

"Face fly" has become almost synonymous with the word "pink-eye." This is not entirely correct. Cattle can have pink-eye with or without the presence of the face fly. Pink-eye can occur any time of the year and is thought to be caused by a bacterium called *Moraxella bovis*, plus an irritation such as ultraviolet light from the sun, or dust, grass awns, and viruses. As far as we know, the bacterium cannot grow in the face fly. The fly only acts as a mechanical carrier of bacteria from the eyes of one animal to another, a job the fly does very well. The face fly transmits bacteria

readily and shows no breed preference among cattle.

Infectious pink-eye is not the only cause of bovine eye problems, however. Eye problems that show up in your cattle should be diagnosed, because they can indicate infectious diseases such as red-nose, malignant catarrhal fever, bovine virus diarrhea, etc. Early diagnosis is important in case of cancer-eye, as the animal can often be saved with proper diagnosis and treatment. It is best to seek the advice of your veterinarian for a diagnosis, treatment, and prevention program. Many of these eye conditions can be in combinations. For instance, infectious pink-eye can occur with or as a result of vitamin A deficiency or red-nose infections.

The following chart is a guide to enable you to better understand eye conditions of cattle.



<b>Disease</b>	<b>Cause</b>	<b>Incidence</b>	<b>Symptoms</b>	<b>Prevention</b>	<b>Remarks</b>
<b>Pink-eye (Infectious Keratitis)</b>	<b>Moraxella Bovis</b> Bacteria + irritation (ultra-violet light, dust, grass awn, viruses.)	Mostly young animals. (Can occur at any age, however.)	<ol style="list-style-type: none"> <li>1. Small ulcer on the cornea</li> <li>2. Much tearing of clear fluid</li> <li>3. Eye very sensitive</li> <li>4. Tissues around eye become red and slightly swollen</li> <li>5. Ulcer can progress to rupture of cornea. Eye cloudy</li> <li>6. Loss in production up to 50%</li> <li>7. Usually affects only one eye at a time</li> </ol>	<ol style="list-style-type: none"> <li>1. Control flies and other insects</li> <li>2. Isolate new animals for 60 days</li> <li>3. Give infected animals daily treatment</li> <li>4. No reliable control methods known</li> </ol>	<ol style="list-style-type: none"> <li>1. No vaccine is available</li> <li>2. Most common during fly season. Can occur in the winter</li> <li>3. Face flies spread pink-eye more than horn flies because face flies do not stay on the same animals as do horn flies</li> </ol>
<b>Mucosal Disease Complex</b>					
<b>1. Red-nose (IBR)</b>	Viral	Autumn and early winter, mostly in young cattle, mostly in feedlot	<ol style="list-style-type: none"> <li>1. Much white to yellow eye discharge</li> <li>2. Animals not sick, but can progress to respiration stages</li> <li>3. Affects both eyes</li> </ol>	Vaccinate animal after 8 months of age. Do not vaccinate pregnant animals (live vaccine).	Eyes usually clear up after two weeks, barring other complications
<b>2. Bovine Virus Diarrhea (BVD)</b>	Viral	Fall and winter, mostly. All ages, but mostly cattle 6-24 months	<ol style="list-style-type: none"> <li>1. Clear eye discharge due to ulcers on margins of eyelids</li> <li>2. Other virus diarrhea symptoms usually present (stiffness, diarrhea, etc.)</li> <li>3. Affects both eyes</li> </ol>	Vaccinate 6-8 months if infection is in herd. Do not vaccinate pregnant animals (live vaccine).	Eye symptoms do not become serious with no other complication. Other symptoms of the disease very serious
<b>3. Malignant Catarrhal Fever</b>	Viral	Most in cattle 6 months to 4 years, during autumn and spring	<ol style="list-style-type: none"> <li>1. Eye becomes white around edge of the cornea and works to the center</li> <li>2. Much eye discharge</li> <li>3. High fever and animal very ill</li> <li>4. Affects both eyes</li> </ol>	<ol style="list-style-type: none"> <li>1. No vaccine</li> <li>2. Isolate sick animals</li> </ol>	Not too common in Idaho

#### **Non-infectious Eye Problems**

1. **Vitamin A Deficiency**  
Nutritional  
Most in late winter and early spring in  
Summers with drought conditions most conducive to vitamin
1. **Night blindness**
2. **Protruding eyeballs and**
1. **Correct diet supplement with vitamin A either in**



2. Trauma	Non-specific	Any age	Remove offending object (nails in bunks, dehorn cows, etc.)	Seen fairly commonly in cattle pastured in brushy areas
1. May be injury to eye lids and area around eye	1. Much tearing of the eye	1. Do not throw hay over animals heads when feeding	1. If you suspect foreign bodies, look under the eyelids of the animals	
2. May have infection with bacteria	2. Cornea can become cloudy in area of irritation	2. Be careful when feeding fine chopped grain in windy weather	2. Remove the foreign body and treat with mild antibiotic ointment if not too severe	
3. Blood often seen	3. Area may become invaded with bacteria, resulting in loss of eye	3. Cut hay before Cheat grass becomes mature		
4. Usually only one eye	4. Occurs in one or both eyes	4. Overhead feeders are conducive to foreign bodies of the eye.		
2. Foreign bodies	Feed awns and grass seeds	Often in cattle being fed hay with Cheat or June grass. Also in windy weather when feeding fine chopped grain		
4. Allergies	Weeds, etc.	Usually in spring and summer	1. No way to keep animals affected off offending grass	1. Animals can be allergic to many things 2. Antihistamine treatment usually brings prompt relief

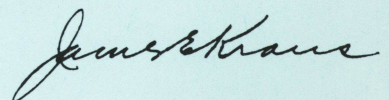
### Neoplastic Conditions

1. Cancer-eye (Carcinoma)	Not known May be chronic irritation	Usually in older animals. The greater the age, the higher the incidence. Animals without dark pigment around eyes are most susceptible	1. Early stage may appear as a wart or wound in eye 2. May enlarge rapidly to a large growth 3. Tearing usually evident 4. Usually one eye	1. Prompt treatment of the condition is essential, for often the eye can be saved if treated surgically early
2. Warts (Papilloma)	Viral	All ages	1. Warts are on eyelids 2. From small horny growth to huge masses on lids and other body areas	1. Vaccines may be used for treatment 2. These are often mistaken for cancer-eye in the early stages 3. Laboratory diagnosis may be needed to differentiate from cancer-eye 4. Slower growing than cancer-eye
			1. Reduce exposure by keeping infected animals isolated	



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