

Pinkeye Prevention in Cattle

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Pinkeye Prevention

Key Steps

- Prevent irritation to the eyes of cattle
- Vaccination
- Immune response of cattle
- Fly control
- Cattle handling
- Treatment



Prevent Irritation to Eyes

- **Dust**—Sprinkle corrals before working cattle
- **Tall grass and seed heads**—Mow pastures before putting young calves and cows if grasses are tall and have headed out
- **Pollen**—usually from grasses and mow when practical
- **Stickers/plant awns/foxtails**—often grow in drier parts of pastures, consider Roundup or soil sterilent in problem areas

Vaccination to Prevent Pinkeye

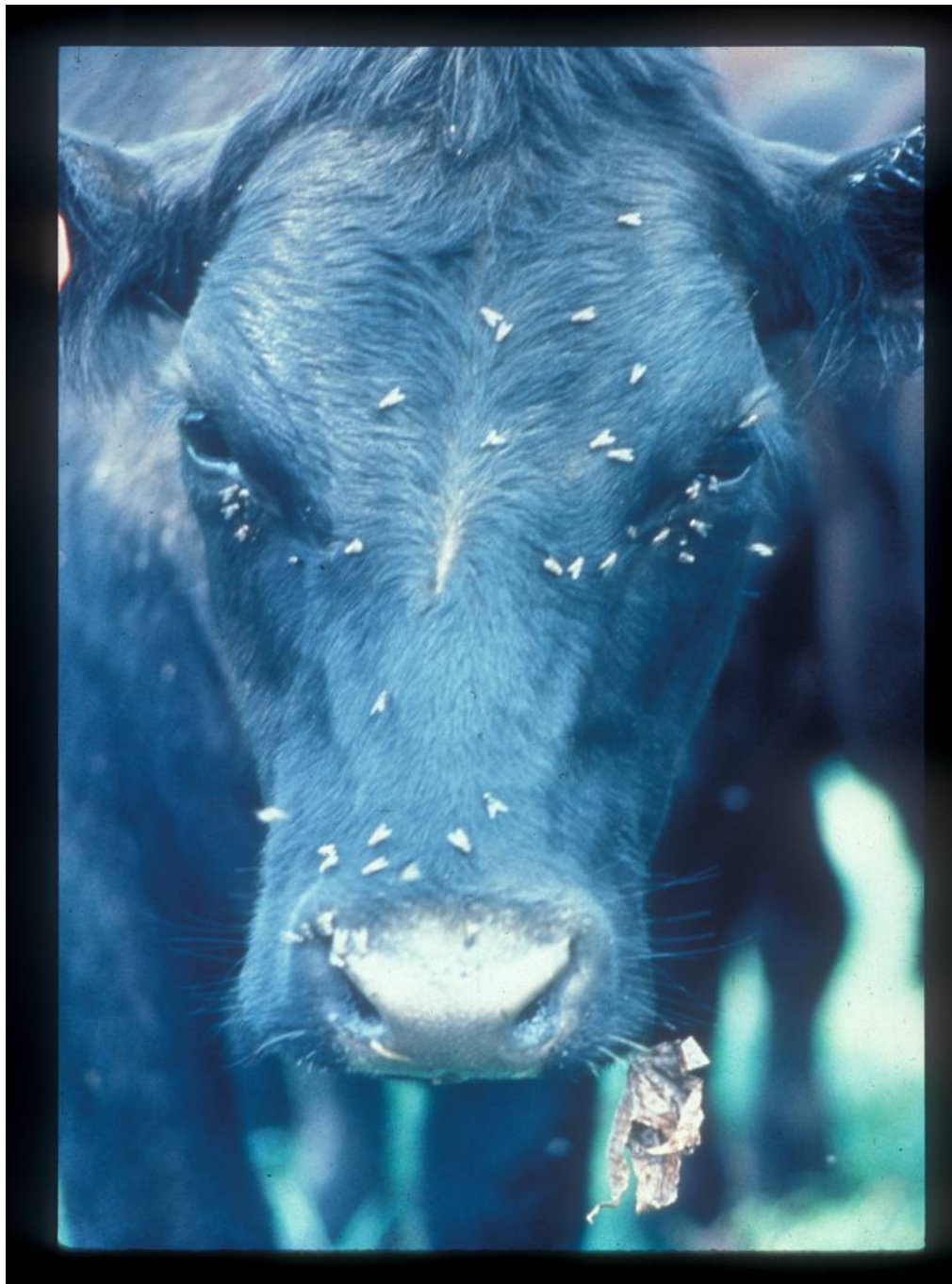
- **Limit to effectiveness of current vaccines**
- **Cross protection of strains not great**
- **Vaccines take time to work**—14 days for first major antibody response. Some vaccines require a booster (2nd) dose. Practically, count on 35-42 days for maximum protection.
- **Work closely with your veterinarian** in selecting a vaccine. Vaccinate early/before fly season.

Immune Response & Pinkeye

- **Calves most susceptible to Pinkeye**
- **Copper (Cu) deficiency**
- **Selenium (Se) deficiency**
- **Common for calves to run out of Se & Cu at 3-5 months of age**
- **Protein**—dry feed can be a problem
- **Other trace minerals/vitamins**—I, Zn, A, E

Fly Control & Pinkeye

- Control of face flies a critical factor in Pinkeye prevention
- Also, controls horn flies which are a major economic loss for cattle
- Many tools to aid in fly control—none are perfect!



Fly Control & Pinkeye Tools

- Ear tags
- Sprays
- Pour-ons
- Back rubbers/face rubbers
- Dust bags
- Feed through insecticides

Fly Control—Ear tags

Many brands

Two main classes—Organophosphates and
Pyrethroids

Two relatively new classes—Organochlorine
(Avenger—Endosulfan) & Avermectin
(XP820—Abamectin)

Fly Control—Ear Tags

- Put them in calves—most susceptible
- Delay application—use sprays or other methods early in fly season. Limited time, highest release early, half life.
- Alternate class of drugs—OP to Pyrethroids to OP or others
- Alternate class of drugs—ear tags, sprays, etc
- Can cause irritation in ears
- Remove in fall—decreases resistance

Fly Control Sprays

- Best for early season or “outbreaks”
- Requires grouping of cattle
- Read directions carefully
- OPs, Pyrethroids, & Spinosad (Elector)

Fly Control Pour-ons

- Requires excellent restraint—chute work
- Several drug classes
- OPs—Ultra-Saber, Lysoff
- Pyrethroids—Cylence, DeLice, Expar, Atroban
- Elector—Spinosan
- Pyrethroid + IGR—Clean Up

Fly Control Back Rubbers & Dust bags

- Older compounds
- Cattle use daily
- Shade and rest areas often work best
- Near water or salt areas—keep some distance so feed or water doesn't become “contaminated”

Fly Control Feed Throughs

- Rabon (OP)
- Methoprene (IGR)
- Usually in a salt mineral mix or other supplement form
- Voluntary consumption—often calves eat very little
- Drug not absorbed in GI tract—acts in manure (obligate site of fly larvae)

Fly Control—Cattle Handling

- Don't spread the disease yourself
- Disinfect halters, nose tongs, etc
- Use disposable rubber gloves
- Use new disposable needles around eyes
- Use BQA procedures when giving antibiotics
- Wash contaminated clothes or gear
- Disinfect tools (forceps, hemostats) used for pulling foxtails

Pinkeye Control--Treatment

- Effective Treatment of cases is a critical point in prevention
- More than 5% of calves with Pinkeye—review your program with your veterinarian
- More than 30% of cases needing retreatment—review your program
- Use drugs that make sense from a scientific standpoint
- Culture and antibiotic sensitivity may be a good idea if >5% of calves or >30% re-treatments needed

Pinkeye in Cattle

Treatment

- Bacterial disease
- Many antibiotics used
- Some actually “work” or are proven to be efficacious



Pinkeye in Cattle

Treatments

- Long-acting Oxytetracycline (200 mg/ml— Biomycin® 200 or LA 200®). Dosed at 9 mg/lb (20 mg/kg) SQ at 48-72 hour intervals
- Tulathromycin (Draxxin®) 1.1 mg/lb (2.5 mg/kg) SQ as single treatment
- Florfenicol (Nuflor®) 9 mg/lb (20 mg/kg) IM repeated in 24-48 hours
- Florfenicol (Nuflor®) 18.2 mg/lb (40 mg

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Treatments

- Ceftiofur (Excede®) 3 mg/lb (6.6 mg/kg) SQ given as single dose
- Procaine Penicillin G 300,000 IU given in the bulbar conjunctiva for 3 days
- Addition of dexamethasone 1 mg to Pen G treatment showed no detectable advantage or disadvantage in IBK management—no subjective measurements possible

Pinkeye in Cattle

Treatments

- Adjunctive therapy
- Banamine®
- Eye patches
- Fly treatments—sprays
- Treatment associated spread of microbes—a case for use of disposable gloves



Pinkeye in Cattle

- QUESTIONS?
- COMMENTS!
- SUGGESTIONS!