# Introducing a breakthrough product to kill flies and other livestock parasites





### Flies Pose a Significant Threat to Livestock & the Bottom Line

- Face flies and horn flies annoy cattle, resulting in reduced grazing time and increased energy expenditure
- The annoyance, irritation and blood loss caused by flies:
  - Reduces weaning weights of calves nursing fly infested mother cows by 12 to 14 pounds
  - Reduces average daily gain of grazing yearly steers by as much as 30 pounds during the grazing season
- Biting flies are carriers of disease including anaplasmosis and bovine leucosis virus
- Face flies spread Moraxella bovis which causes pinkeye
- The Horn Fly alone has been estimated to cause \$1 billion in animal losses to the U.S. beef industry annually



#### Current Pesticides are Deficient

- Current pesticides have MINIMAL EFFICACY
- Flies have become resistant to the current pesticides, making them ineffective and requiring constant pesticide rotation
- Current pesticides are highly toxic
  - o To the user
  - To other people or pets that might come in contact with it
  - To the environment
- Current pesticides have re-application limits and re-entry wait times



#### Davis Livestock Spray is PROVEN Effective, Nontoxic, and Less Expensive!

- ✓ Kills even resistant flies
  - Horn Flies, Flesh Flies, Stable Flies, House Flies & Bottle Flies
- ✓ Also kills animal parasites such as mosquitoes, fleas, ticks & mites
- ✓ Does NOT contain Pyrethrin or Permethrin
- √ Simplifies chemical rotation
- ✓ Non-toxic
  - ⇒Safe to use in and around animal quarters as well as directly on livestock
  - ⇒ No re-entry wait time or re-application limit
  - ⇒Safe for the environment

And... it is less expensive than the leading brand!



## Chemical resistance has made the current pesticides ineffective, and requires complex rotation to deliver any efficacy whatsoever

- "Horn Fly resistance to Pyrethroids has developed"
   Ralph E. Williams, Purdue University
- The early pyrethroid insecticides were very effective...for a
  while. After only a few years flies began to develop resistance
  to pyrethroid insecticides. Insecticides used for horn fly
  control have documented resistance, especially pyrethroid and
  organophosphate insecticides. Keep in mind that rotation
  between chemical classes is necessary.
  - Brian Beer, Southeast Cattle Advisor
- "It has been scientifically documented that routine fly control has created flies that are resistant to many (perhaps all) of our available insecticides"
  - Kit Pharoah, Pharoah Cattle Company.



### Davis Livestock Spray is Non-toxic

Davis Poultry Spray Label	Gordon's Permethrin 10 Label	Prozap Aqueous Fly Spray Label
<ul> <li>Non-toxic</li> <li>No re-entry wait time</li> <li>No re-application limit; treat as often as necessary</li> <li>Safe for direct application to livestock</li> <li>Environmentally friendly</li> </ul>	<ul> <li>Harmful if inhaled</li> <li>Do not enter treated area until spray has dried and treated area has been thoroughly ventilated</li> <li>Do not use on cats. May be toxic or fatal if applied to or ingested by cats.</li> <li>2 week application interval required between treatments</li> <li>Environmental hazards</li> <li>This product is highly toxic to aquatic organisms.</li> <li>This product is highly toxic to bees.</li> </ul>	<ul> <li>Harmful is swallowed, inhaled, or absorbed through skin.</li> <li>Vacate treated area and ventilate before reoccupying. Remove pets, birds and cover fish aquaria before spraying.</li> <li>This product is highly toxic to fish.</li> </ul>
	This product is mighty toxic to bees.	



### How Can Davis Livestock Spray be More Effective and Non-toxic?

- Breakthrough technology has a completely different mode of action versus traditional insecticides
- This insecticide targets neurological receptors active only in insects and arthropods
  - These neurological receptors are not active in mammals or aquatic vertebrates
- Unique formulations have been proven effective, even against insects that have developed a chemical resistance to traditional insecticides



# Davis Livestock Spray is the Obvious Choice to Control Flies and Other Animal Parasites!





