Parasite Issues of the Virgin Islands

DR. BETHANY BRADFORD
DIRECTOR OF VETERINARY SERVICES, VI DEPARTMENT OF AGRICULTURE

Virgin Islands:
St. Croix
St. Thomas
St. John

USVI is a Territory of the United States
Population about 110,000

St. Croix 83 square miles
St. Thomas 32 square miles
St. John 19 square miles
Virgin Islands Department of Agriculture

About 50 employees in three stations
Main office is in St. Croix
The Government leases 1500 acres to farmers for livestock and crop production in St. Croix, 50 acres in St. Thomas and 4 acres in St. John
This represents the bulk of farm activity

VIDOA provides Land Development Services

Bulldozing
Tilling, ploughing, harrowing
Brush clearing
Dam construction and cleaning
Abattoir Services

One abattoir in St. Croix and in St. Thomas
One FISIS inspector travels from Puerto Rico every week
Heaviest slaughter period is Christmas for cattle, pigs, and goats
Bush kill is prohibited by law for meat intended for sale
Many animals are bought live on the hoof and killed for family consumption
USVI Muslim population buys large quantities of sheep for the Muslim holidays

Water Services

VIDOA provides water to farmers by delivering to the farm or maintaining water tanks at each VIDOA station for farmers to fill up on their own
Hay baling and Molasses

VIDOA maintains hay fields and makes and sells round bales and small bales for farmers. VIDOA also provides molasses for livestock farmers by purchasing it from the Cruzan Rum factory out of their 3 million gallon tanks.

Division of Veterinary Services

VIDOA VS Crew:
Tyron Lake
Dr. Bradford
Ayanna Simon
Trevor Aldridge

VIDOA VS is stationed in St. Croix and covers all three islands. In 2006 there were three VIDOA veterinarians, 1 VMO, and 1 FSIS Veterinary Inspector. Today there is 1 VIDOA Veterinarian.
Animals and Farms

686 registered farmers, horse owners and poultry owners in USVI

- 1000 beef cattle
- 3000 meat goats
- 4000 hair sheep
- 1000 swine
- 5000 gamebirds
- 1800 commercial chickens
- 1100 horses

Duties of VIDOA VS

- Provide medical, surgical and emergency services to livestock farmers
- Provide tick control services: Coumaphos
- Tag and microchip livestock and horses
Duties of VIDOA VS

- Regulate imported and exported animals
- Maintain data base of farms, livestock, horses
- Impound and dispose of stray livestock and horses
- Investigate cases of abuse and neglect of livestock and horses
- Perform animal health surveillance

Parasite Issues in USVI

- Rhipicephalus: Boophilus
- Ixodes: tropical horse tick
- Ixodes: southern cattle tick
- Tropical Bont Tick
- Intestinal parasites: the usual suspects
- Kidney Worms
**Endemic Babesiosis**

* Babesia bigemina and bovis
* Babesia caballi and equi
* Anaplasmosis

Tick spraying with CoRaI of all registered livestock and horses is the most common daily activity of VIDOA VS team.

**Quarantine**

USVI is under federal quarantine for livestock and horse movement because of Rhipicephalus and babesiosis.

All livestock and horses must undergo a tick quarantine and multiple tests for piroplasmosis before being shipped to the US.
**Tropical Bont Tick**

First identified in St. Croix in the 1960s

Since that time many eradication programs have been implemented by VIDOA and USDA

Bont ticks have generally stayed in central and western areas of St. Croix

Dermatophilosis has been spread by the bont tick in the past

Heartwater has not been diagnosed in VI

---

**2004-2009**

**TBT Eradication Program**

Implemented by USDA with VMO, AHT and 6 local staff

Very effective in enforcing identification and stray animal laws

Over 1300 bont ticks collected from 12 hot spots

Program closed in 2009 with 3 hotspots left under surveillance

VIDOA continued the surveillance program until completion in 2012
Coumaphos and Long Acting Doramectin

TBTEP used a variety of tick control products
Coral (coumaphos) was used bi-weekly on most animals
Amitraz impregnated collars were used on the sheep
Long-acting doramectin was used on the cattle

Current Bont Tick Program

In 2013 bont ticks were discovered on one farm on the western end of St. Croix
This farm had been one of the last hot spots in 2009
Surveillance had been completed on this farm in 2012
The Bont ticks were found during a routine farm visit by VIDOA VS
Current Bont Tick Program

In 2014 VIDOA entered into a new Cooperative Agreement with USDA to assist with this new bont tick population

Bi-weekly scratching and treatment with CoRAl is done by VIDOA VS

Perimeter farms are scratched and treated every month

SCWDS has trapped mongoose in the area and did not collect any bont ticks

Current Bont Tick Program

Tick surveillance by VIDOA VS outside of the quarantined farm includes regular collection of ticks during daily farm visits, from impounded animals and from the abattoir

In June 2015 USDA hired an AHT for the USVI

VIDOA VS continues to use CoRAL as the main acaricide

No bont tick has been found on or off the quarantined farm since October 2014
Other Challenges

USVI is currently experiencing a serious drought particularly in St. Croix.
Pastures, hay fields and water supplies have all been effected.
Most farmers and horse owners rely on local pastures or cut and carry systems to feed animals.
The drought has curtailed all local hay production and destroyed most pastures.

VIDOA is assisting farmers by importing hay and feed at a reduced cost with funds provided by the Government.
VIDOA VS is working with FSA to implement indemnity programs for livestock farmers who have lost animals due to the drought.
Drought conditions still persist into this current rainy season.
But it’s still paradise....

Thank you