



Preliminary observations and lessons
from the implementation of
immunocontraception in a dense
suburban free-range environment
May 2, 2018

Mayor Swiderski Trustee Lemons
Village of Hastings-on-Hudson



Agenda

- **Decision factors**
- **Implementation**
- **Lessons**



Summary of major decision factors against lethal methods

- Examined two lethal approaches: bow-hunt & net-and-bolt
- Would take several years to bring the numbers down to recommended levels.
- Would be required every two or three years into perpetuity.
- Hunting would be in a narrow portion of village due to restrictions. Net-and-bolt would always involve professionals: never will be done by volunteers because of the risk and brutality involved.
- Most stressful on the deer.
- Cultural issues.

Summary of major decision factors In favor of immunocontraception

- Potentially equally effective as lethal methods, but over a longer period of time (4-5 years)
- Cheaper long-term because it can involve volunteers
- Support of funding organizations
- More sustainable in terms of community support; no likelihood of recoil as with lethal options.

Implementation

- Immunocontraception research study designed by Dr. Rutberg of Tufts University.
- NY State DEC reviewed and approved the 5-year study
- The Humane Society provided implementation team.
- Village provided housing and support for the HSUS team during the darting season
- Community support was sought through several public meetings, mayor's email communication
- Community volunteers were enlisted (over 100 participated)

The Implementation Team

- Research study is run by Dr. Rutberg of Tufts University and the Humane Society US.
- The Humane Society implementation team has been responsible for all darting and immunocontraception delivery.
- Effort is supported by volunteers, students, police, local vets and the DPW.
- Program metrics:
 - collected by local volunteers
 - analyzed by graduate students



Public Engagement

- Dealing with misconceptions such as:
 - There are quick solutions that we seem to be unwilling to utilize: just shoot them!
 - Deer are easy to find and darting them should be simple to do
 - Deer all live in the woods
 - In the first years of the study:
 - I saw a tagged doe with fawns; this isn't working
 - There are already fewer deer
- Utilizing all the volunteers effectively
- Questions about the cost
- Sustaining public support long term
- Establishing reasonable expectations
- Being clear about success indicators



Logistical details

- Finding deer where they could be darted:
 - Feeding stations were set up around the village in or near parks, drawing deer.
 - Deer are drawn to stations and then darted.
 - Residents gave permission
- Metrics are monitored over time to see impact and success.

RISKS

- Immigration
- Darting difficulties
- Sustainability



Metrics

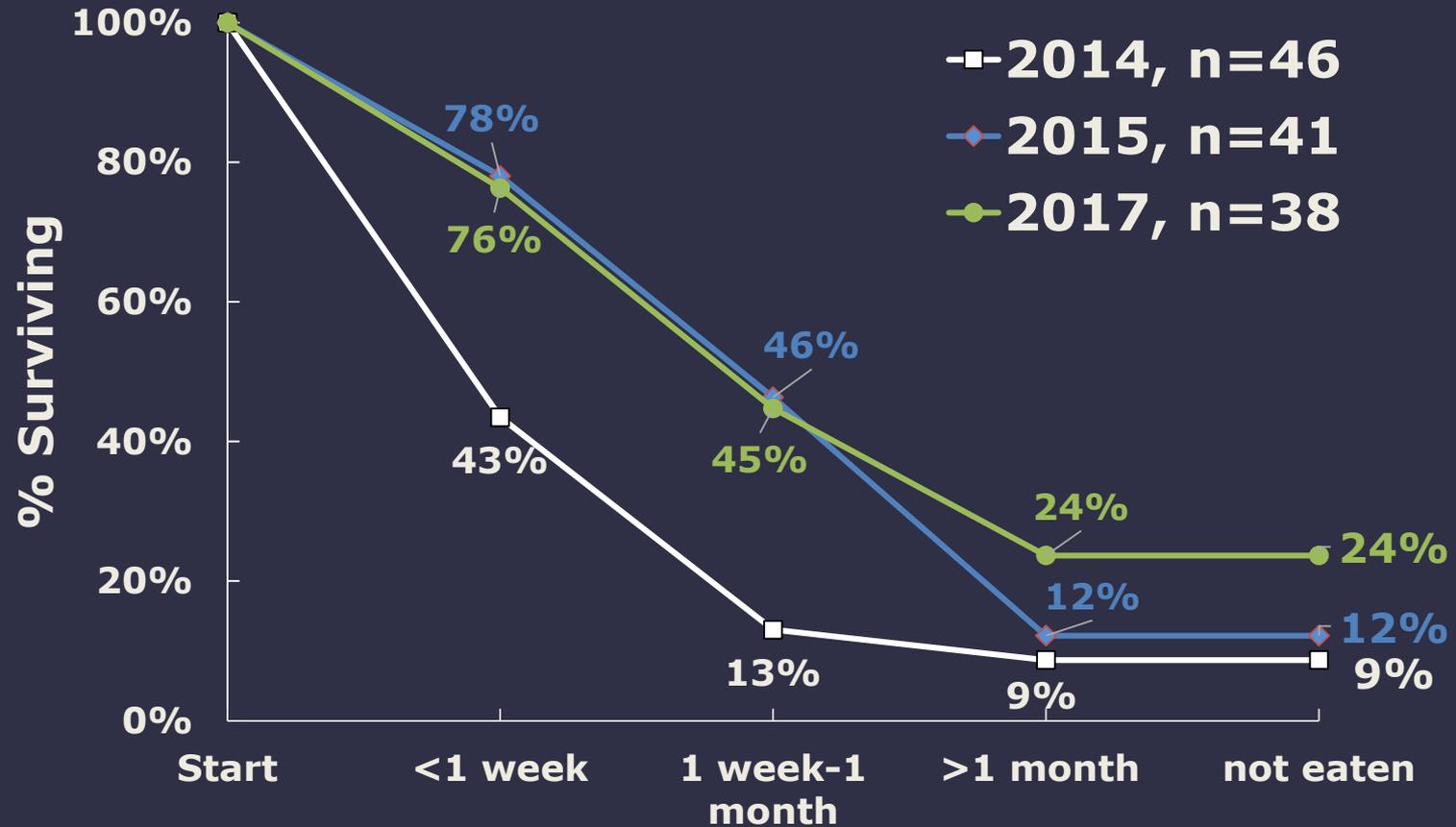
Metrics

Citizen science at its best

- Deer sighting logging by residents
- Population counts via photo trapping
- Hosta honey-pots
- Wood plots
- Accident records
- **Not the deer census**

Metrics

Hosta Survival after Planting



Year 5

- HSUS team has returned every year, continuing to re-dart and monitor for effectiveness.
- Sixty-nine does were darted over a four year period with anesthetics and then injected with PZP.
- 69 does of an estimated population of 80-100 does have been darted and immunized
- Some interesting hosta data
- Still too soon to judge success



Lessons

The Community

- Cultural Issues count: negligible push-back due to approach
- Safety is paramount – actual and perceived
- Public involvement and engagement is critical
- Education never stops
- Annual Reports and Forums

Lessons

The Implementation

- Knowing the community = success
- Metrics are important – and hard
- Deer differ geographically
- Immigration is your enemy
- Deer don't range far
- Deer don't stand still
- Darting in a dense suburb is hard