



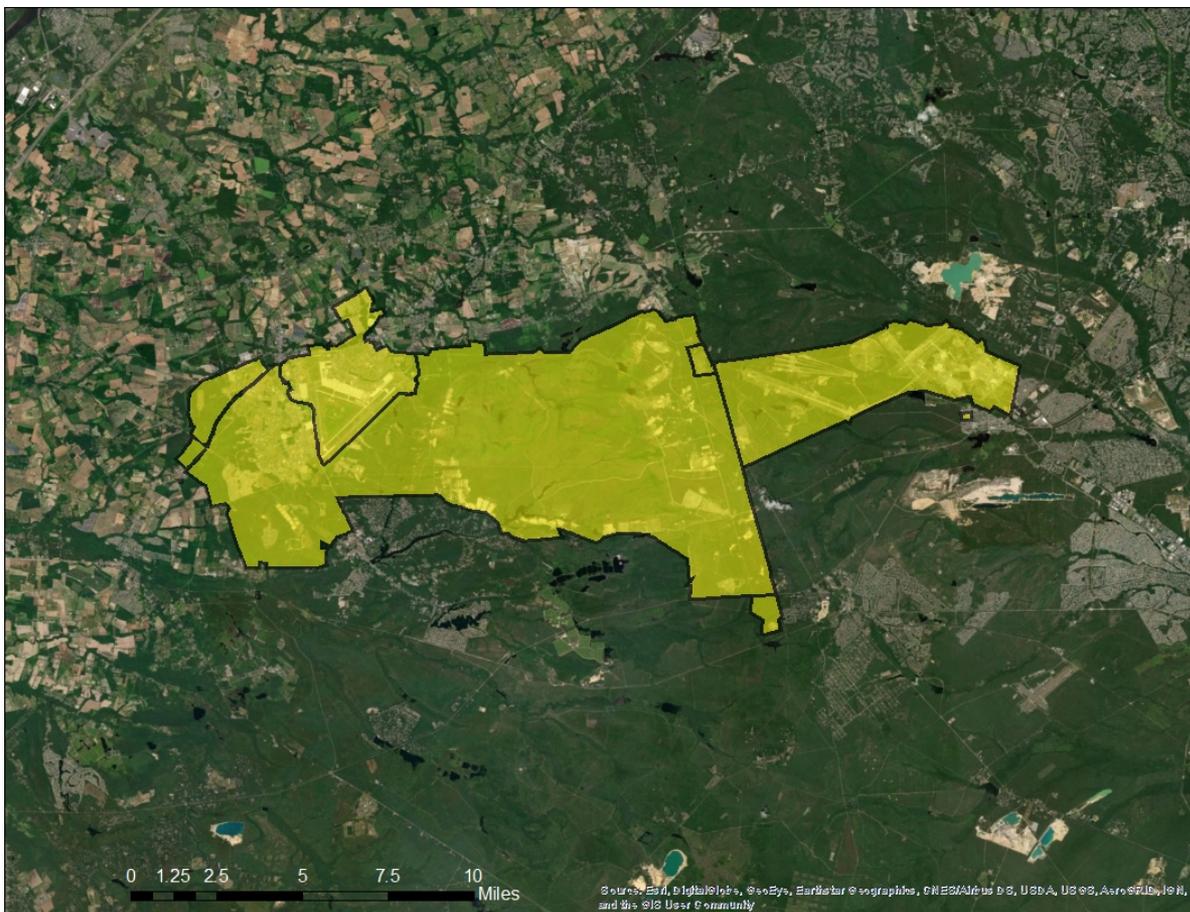
United States Department of Agriculture

Managing White-tail Deer on a Military Installation



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Joint Base McGuire-Dix-Lakehurst



- Located in Southern NJ on the East coast of the US
- Air Force, Army, and Navy base combined into one
- 2 airfields
- Base total acreage = 42,000Acres. McGuire = 3,500
- Airfield fencing is in poor condition
- Vegetation was maintained as long grass management

Background

- WHA at McGuire
- The BASH program at JB MDL was poorly documented but has 3 rumored deer strikes since 1990 (C-17)
- Deer Management limited to a hunting program (confined to less active areas of the base)
- Active Deer Management on both Airfields (21 deer removed in 2015 and 14 in 2016)
- Deer strike at JB MDL



Objectives

- Accurately assess the deer population through standardized surveys
- Maintain active communication involving all parties in a joint use military base operation
- Obtain the necessary permits for efficient wildlife management in NJ
- Work closely with the Natural Resources personnel to enhance the hunting program
- Provide a management plan that is data driven and can be repeated

Surveys

1. Choose a method that accurately assesses deer population
2. Choose a method that provides usable data that can be easily repeated







Visible Acres

- **Equation-** Total yards of visibility / number of 1/10mile stops + 1 the start point X Number of miles X 1,760 / 4,840 = Visible Acres
- **Figures:**
- **Total Yards of Visibility** = 4495+4409= 8904
- **Number of 1/10 mile stops** = 42
- **Number of miles** = 4.2

- **McGuire data-** $8904 / (42+1) \times 4.2 \times 1760 / 4840 = 316.25$ Visible Acres

Conducting Surveys



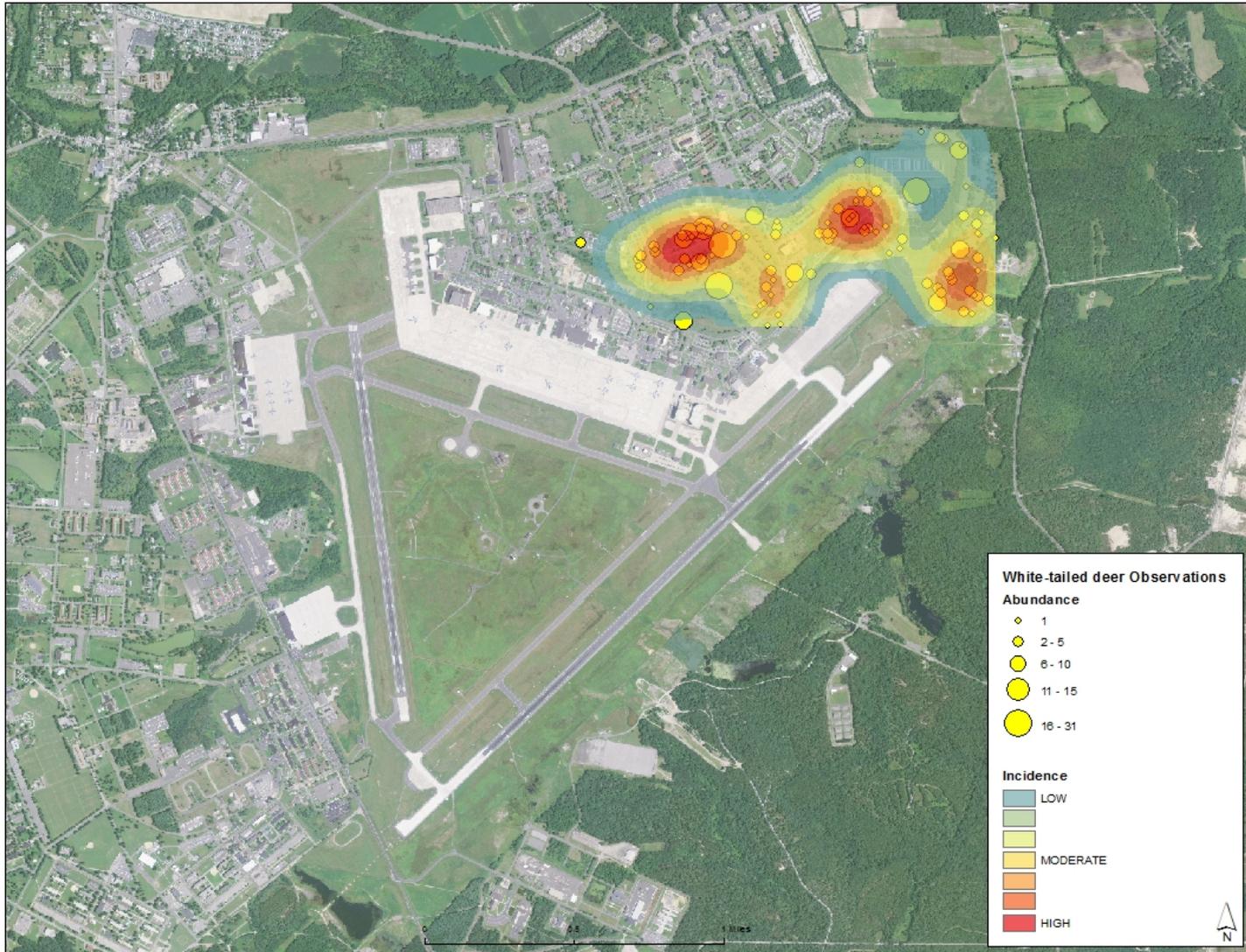
- 5-8 MPH
- 1-2 hours after dusk
- 3 person operation



Survey Results

- **Survey 1** – 39 total deer
- **Survey 2** – 57 total deer
- **Survey 3** – 51 total deer

- **Total number of visible Acres / total number of deer**
- **McGuire Data-** $(316.25 \times 3) / (39+57+51) = 948.75/147 = \underline{\text{One deer per 6.45 Acres}}$
- 1 square mile = 640 acres
- $640 \text{ acres} / 6.45 = \underline{\text{99.2 deer per square mile}}$
- Manageable Carrying Capacity of deer = 20 deer per square mile





Develop Management Plan

- Deer removal was deemed necessary
- Obtain Approval
- Educate Base Leadership of the options and risks involved (numerous meetings)
- Stand work vs. Mobile shooting

Obtaining Approval

- Joint Base MDL has multiple Wing Commanders / communication was challenging
- Meetings, Meetings, Meetings
 - Security Forces
 - Natural Resources
 - Environmental Lawyers
 - Ground Safety
 - Multiple Facilities Surrounding Removal Sites
 - The State of New Jersey



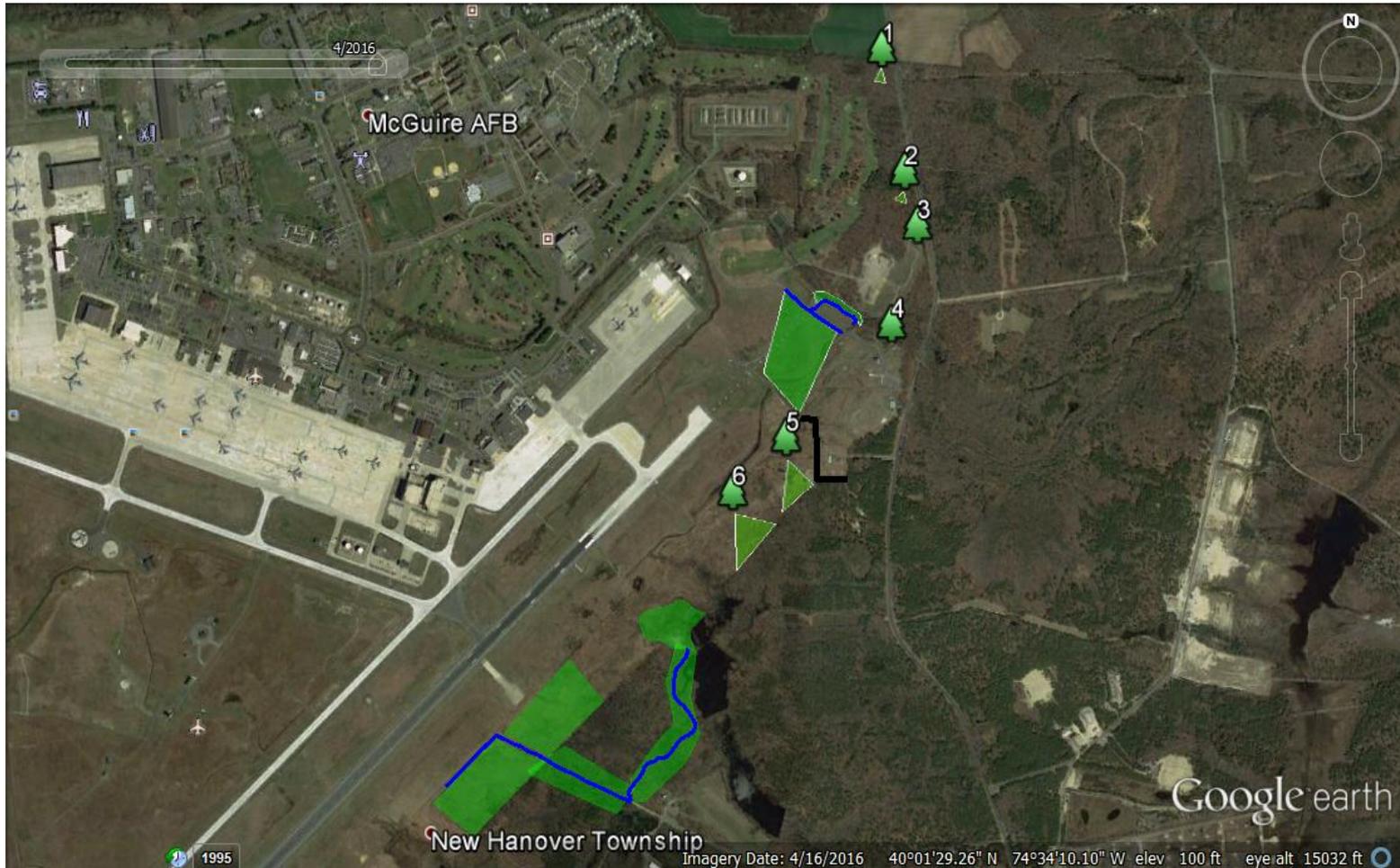
Obtaining Approval







2017 Final Approved Areas



2017 Deer Removal Results

- 99 deer per square mile determined by standardized surveys (20 deer per square mile is suggested healthy carrying capacity)
- “Light mobile shooting” combined with stand work
- 34 deer removed and donated to Hunters for the Hungry

2018 McGuire Removal

- Continued standardized surveys
- Still above carrying capacity at 66 deer per square mile
- Procured Community Based Deer Management Permit from NJDFW (allowed for shooting from the top of the truck and use of suppressed rifles)
- Expanded mobile shooting areas



Deer Removals

First Deer Removal 2017

- Surveys resulted in 99 deer per square mile (20 per square mile suggested density)
- Limited “light mobile shooting”
- Stand work
- 9 total nights (63hrs) of deer removals conducted
- 34 deer removed and donated

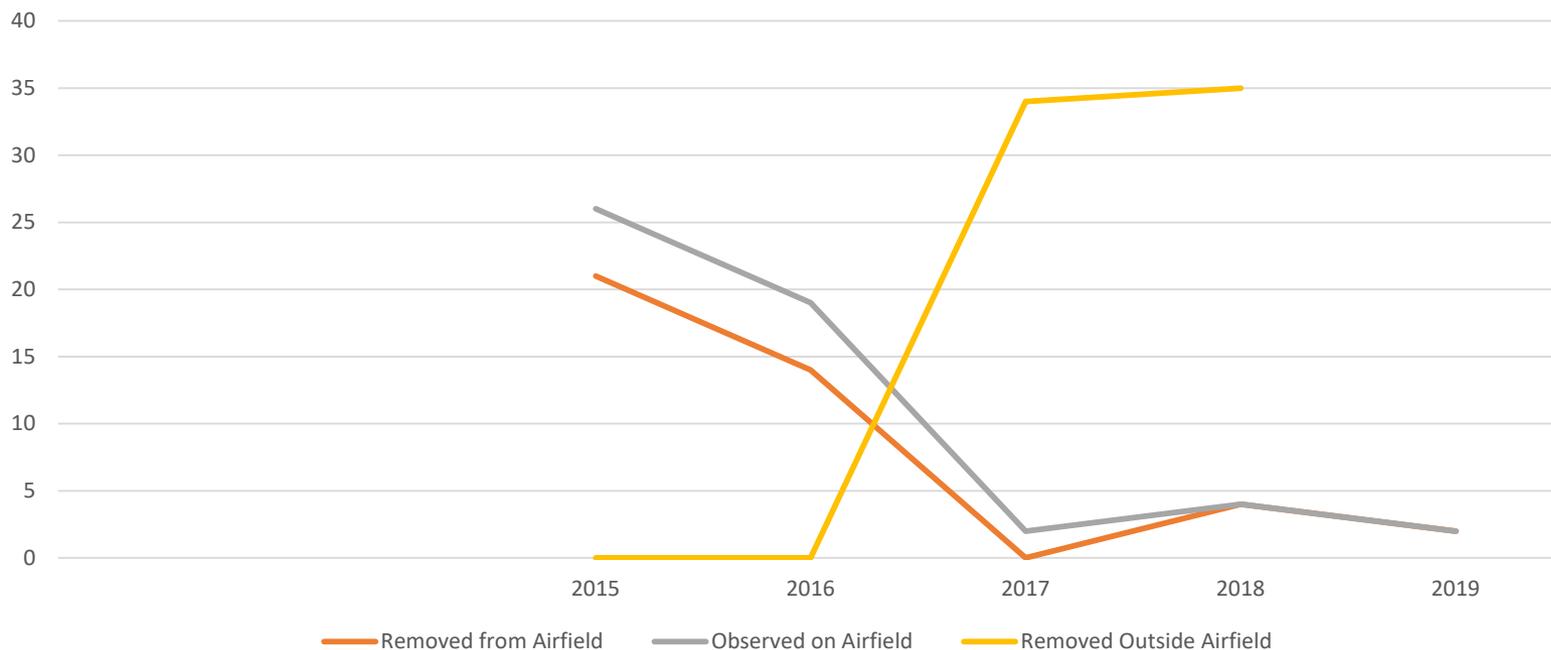
Second Deer Removal 2018

- Surveys resulted in 66 deer PSM
- New Community Based Deer Management Permit (CBDMP)
- Worked with base to expand deer hunting areas and extend hunting season
- Deleted stand work
- 3 total nights (21hrs) of deer removals conducted
- 35 deer removed and donated



Results of Deer Management On and Off Airfield

Deer Management



2019 Status

- Fluctuating between 15-25 deer per square mile
- Vastly expanded hunting areas and extended hunting season
- Controlled archery hunts are organized by the Natural Resource department
- Number of deer breaching the airfield fence has been drastically reduced (from 26 in 2015 to 4 in 2018)

Conclusion

- The first time an accurate deer population census was conducted at McGuire
- We used a standardized survey route and procedure that can be repeated for years to come
- We had a management goal that was data based
- JB MDL now has a long term deer management plan, which results in a safer airfield environment