

A group of sika deer with large, dark antlers are standing in a lush green field. The deer in the foreground are looking towards the camera, while others are visible in the background. The scene is brightly lit, suggesting a sunny day.

Invasive Species Highlight: Sika Deer

MEES 718I: Invasive Species Management
Nicholas Coleman

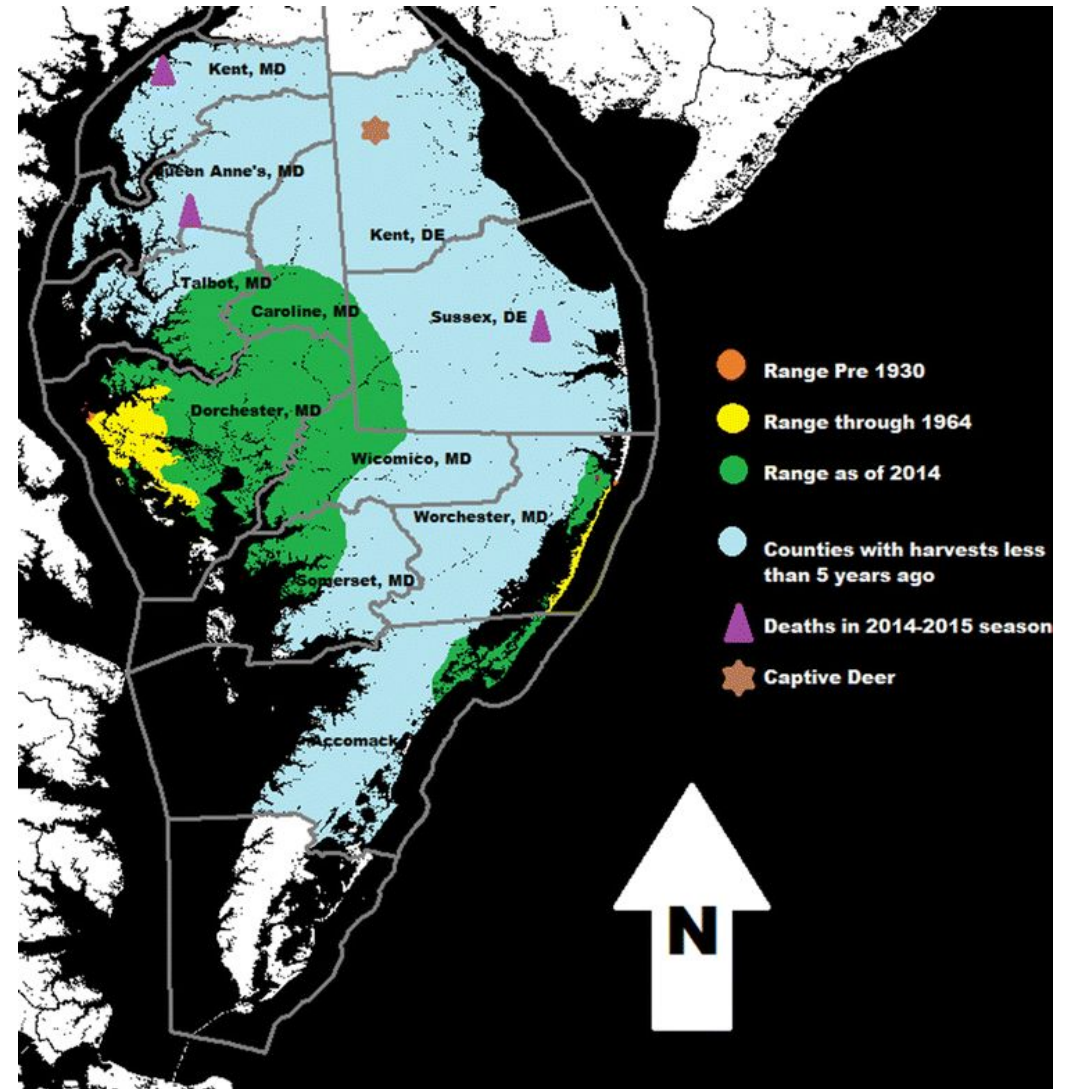
Background

- **Latin name:** *Cervus nippon*
- **Home Range:** Native to the islands of Japan and Taiwan and the East Asian mainland where they prefer marsh and forested wetland habitat
- **Size:** Males weigh approximately 90lbs, females weigh around 70lbs
 - White tail deer: Males weigh approximately 300lbs, females weigh around 125lbs
- **Diet:** generalist herbivore feeding on marsh grasses, fallen leaves, poison ivy, **soybeans**, and **corn**
- **Life history:** live about 15-18 years and can reproduce in their second year, during which a single calve is born



Introduction in Maryland

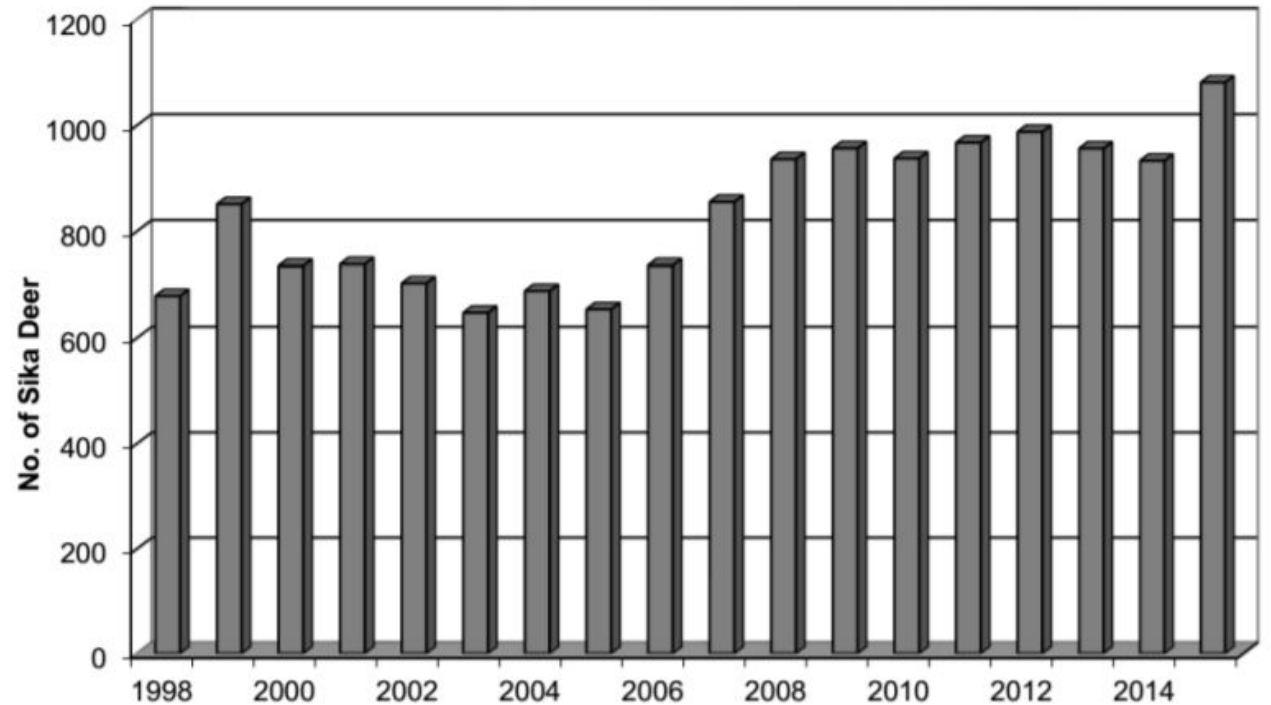
- In 1916 Clement Henry introduced 5-6 sika deer on James Island
- Dr. Charles Law introduced a few deer on Assateague Island in the 1920's
- Major Threats: Crop grazing and forest over-browsing (in areas of very high abundance)
 - Threshold for deer density 8 deer/km² (Engelhart et al. 2019)
- Estimated population: 33 deer/km² (Doughtry and Bowman 2012)
- Concern for this species outcompeting white tail deer is minimal (Keiper 1985; Feldhamer et al. 1978)



(Kalb and Bowman 2017)

Current Management

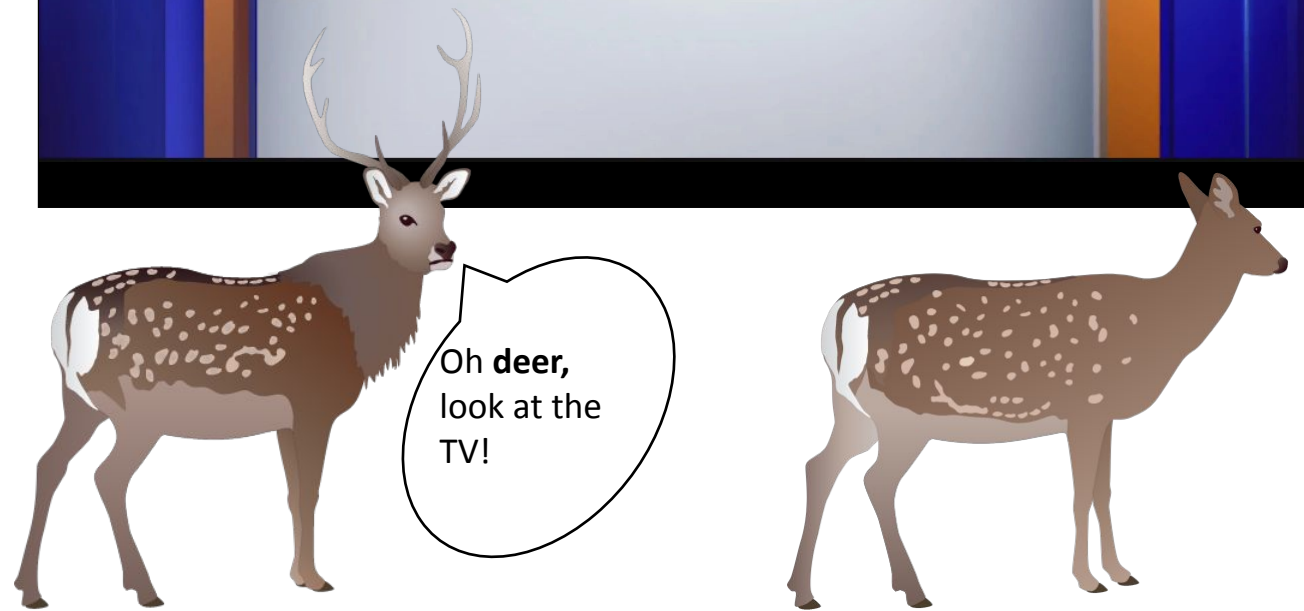
- Considered an exotic species rather than invasive
- “Currently the DNR sika deer management goal is to maintain population at levels observed during the late 1990’s and early 2000’s” (MDNR 2017)
- Federal Aid and Wildlife Restoration Act
- Sika Deer hunting season: September 10th- January 1st
 - Annual Bag limit: 9 deer
 - Crop damage permits allow hunting year round but only at night
- In the 2020-2021 season 3,454 sika deer were harvested (MDNR 2021)



(Englerhart et al. 2019)

Outreach Bridging Knowledge Gaps

- Decrease in hunting
- Limited knowledge on the survival of calves
- Difficulty accessing peer reviewed journals
- Professional meetings are a large area of research exchange
- “I worked on Sika deer as a graduate project so I am familiar with the literature but without that ,it would be difficult to access those peer reviewed journals which keep you up to date” (Brian Eyler)



Summary and Key Take Aways

The non-native population of sika deer released on Maryland's Eastern Shore in the early 1900's has grown consistently since their introduction

And...

An increase in abundance of sika deer causes potential threats to crops, forest biodiversity, and small scale displacement of white tail deer

But...

No management plan or funding is available to explicitly address the increasing sika deer population

Therefore...



Work Cited

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