Norma Manning

From:Robert AndolinaSent:Monday, December 28, 2009 5:47 PMTo:Norma ManningSubject:FW: Cayuga Heights DRAC

As requested

------ Forwarded Message From: Paul Curtis <pdc1@cornell.edu> Date: Thu, 16 Jul 2009 16:07:48 -0400 To: Bob Andolina Cc: Kate Supron <katesupron@gmail.com> Subject: Re: Cayuga Heights DRAC

Hello Bob-

The deer immigration rate back into the community is unknown. Based on one paper by Porter and Matthews, immigration is predicted to be low, and existing females will occupy space and use resources. However, Porter's work was done on low density herds in northern NYS, and this may or may not apply to high-density suburban deer herds. Female deer do not defend "territories" similar to coyotes and other canids, and we see substantial home range overlap for our radio-collared deer on campus. Deer also do not behave like gas molecules and distribute themselves evenly across the landscape. There will always be pockets of higher deer density near the best habitat locations.

Immigration is extremely difficult to measure, and little is published on this topic. The situation in VCH would provide a unique case to actually measure immigration rates if a known number of adult females were tagged, and all other deer were removed. I don't think such a field experiment has ever been conducted previously. My "best guess" based on deer behavior is that culling would need to occur every 3 to 5 years to keep the herd in check. But a relatively small number of deer would need to be shot in follow-up efforts compared to the initial program where 100+ deer will need to be removed from the community. There will be constant pressure from deer moving into VCH from unhuntable, high-density areas in South Lansing.

I hope this information is helpful. Best regards- Paul C.

Hi Paul,

I,m a trustee for the Village of Cayuga Heights and am trying to formulate a way of thinking regarding the longer term costs of the DRAC recommendation.

If we were to sterilize 60 females and then cull the rest, how many deer would you guess would resettle into the area and therefore become a target for further culling or sterilization. I would guess that by having a sterilized group of 60 "holding place‰ this would somehow keep a number of deer from entering our area. My suspicion is that this would somehow keep the cost of ongoing sterilization and culling lower than if we were to simply cull without the sterilization element. Can you help me understand how I should be thinking about this?

Thanks for all your guidance and helpful work on this issue.

Best,

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