

## TICK-BORNE DISEASE PREVENTION COMMITTEE

### QUESTIONS & ANSWERS ABOUT THE PROPOSED SHARPSHOOTING PROGRAM

Question-

How do we know culling deer will actually result in less Lyme disease?

- Scientific research has shown that reducing the final large mammal host prevents Lyme disease ticks from reproducing. At a density of less than 10 deer per square mile, the tick population collapses.

Question-

Yes, but when we hike through the woods on Islesboro we see very few deer, and it seems like there are fewer than previously. Aren't we making progress?

- When Stantec deer counts were done, it was shown that there were 48 deer per square mile on Islesboro, 52 per square on mile 700 Acre Island.
- During bow & arrow season in 2012, 146 deer were taken, and the special shotgun hunt netted 50 (total 196). In 2013-2014, bow & arrow netted 133, and the extended special hunt took 36 deer (total 169).
- This reduction rate is not enough to stay even with deer reproduction and does not approach the necessary 10 deer per square mile goal.
- The special hunt goal each year is 100 deer, the originally acknowledged threshold for effectively reducing the herd. In 2012 we were 50% effective in reaching this goal. In 2013-2014, we were only 36% effective in reaching the goal.

Question-

Yes, but wasn't the hard winter a factor also in deer reduction?

- Perhaps, but it wasn't enough, and in any event succeeding winters might not be as severe. We take the Lyme disease matter out of our hands and place it in Mother Nature's if we depend on weather to solve the problem.
- Mother Nature brought us the tick problem in the first place.

Question-

OK, but our hunters and woodsmen have "eyes on" experience in the island woods and have developed local knowledge. This makes more sense to me than the "PhD experts" that only visit here.

- Local knowledge is important if used to supplement knowledge based on scientific research, not to replace it.
- History shows that prevailing knowledge believed the earth was the center of the universe until scientific study disproved it. Science has been the key to solving the riddle of polio, putting a man on the moon and opening up new cancer treatments. PhD's and qualified professionals did that.
- We ignore the experts at our peril.

Question-



But I'm concerned about the objectivity of people who don't have island experience. They may be out to prove a point or to make money from us.

- The experts we've heard from at Maine Medical Center's Research Institute and the Maine Department of Inland Fisheries and Wildlife have no reason to be anything but objective and helpful. They each have hard earned professional reputations at stake.
- Moreover, in the case of sharpshooting, our expert (White Buffalo's Tony DeNicola) has consistently recommended a sharpshooting deer cull sooner when it would be less expensive than later. He has a national reputation for integrity and is hired by many responsible law enforcement agencies.

Question-

In 2012, at the recommendation of the DRC, the Town voted for three special hunts beginning in late 2012, 2013, and 2014. Why don't we finish the three hunts and then if that doesn't work, consider sharpshooting?

-After the first hunt, Tony DeNicola of White Buffalo, one of the country's great deer-reduction experts, advised the DRC in the strongest terms to discontinue the hunts, for multiple gun shots "educate" the deer and after a few years, although they are there, they can't be found. He said that many communities make this mistake.

-Just last month he repeated the same advice, saying: "I have developed a skill set that is unique to this issue, but it is not magic; just a highly refined and disciplined method and hard work. To allow recreation hunters to pursue deer with firearms in advance of our efforts will completely undermine our ability to meet your goals. I have discussed this issue previously and nothing has changed since. Reducing a deer population to 10 deer/mile squared is extremely difficult under the best case scenario. It will not happen if recreational hunters educate deer in a haphazard effort before we begin our work. It is like having the public enter a crime scene before the police experts arrive."

Question-

How will we know if we're making any progress in deer reduction with sharpshooting?

- White Buffalo will do a count, using the latest camera technology before any sharpshooting is done.
- Each year, during the maintenance phase, deer would be counted so we know when we reach and can maintain the deer herd at 10 per square mile.
- All data will be made available to the Town for independent review.

Question-

I don't want sharpshooters willy nilly all over the island.

- The program would be carried out only on property where landowners give permission.
- Baiting would attract deer to these properties, away from land where there is no permission.

Question-

Why the urgency now?

- The Lyme incidence continues to be a concern with the large amount of the disease and tick bites on Islesboro.



- Moreover, other tick borne diseases are appearing and are even harder to treat.
- Long-term complications from Lyme, such as rheumatoid arthritis and heart involvement are now being treated on the island.

Question-

How do we know the statistics on ticks and Lyme reported by the Health Center are accurate and objective?

- Our PA's have been using a consistent method of reporting.
- They have no reason to inflate the data.
- They are the experts in Lyme treatment here on Islesboro.

Question-

OK, but shouldn't we wait to get the answers to more questions and get more data?

- Data has been collected on Islesboro since 1997.
- The data collection effort has increased over the years to a mountain of evidence that something effective needs to be done to combat what has become a public health crisis.

Question-

Isn't a sharpshooting cull going to cost a lot?

- If we do it this year instead of the special shotgun hunt, it will be cheaper than if we wait.
- Studies have shown that deer are negatively trained by gunfire and get harder to find, thus increasing the expense when sharpshooting is finally employed.
- We have funding for this year and a maintenance program through 2018 in place from the Concerned Citizens of Islesboro (CCI) at no taxpayer expense.

Question-

Yes, but aren't there likely to be unforeseen costs? And what about beyond 2018?

- We have the best estimates possible in hand.
- Yes, things do come up. Any additional costs will be considered during the Town's yearly budgeting process.
- The yearly "maintenance" of the deer herd is very economical once the herd is initially reduced at CCI expense.
- Think about it: There are unforeseen costs in any budget item we deal with. The school budget has new costs, road maintenance has revised expenses, health insurance changes. That's why the Town is flexible, budgeting yearly as contingencies require.
- The yearly budget, once the Concerned Citizens funds are used, is very small compared with other line items.

Question-

Can't we do something besides shoot deer?

Yes! An "all of the above" strategy is welcome as a supplement to a sharpshooting program. It will help reduce the incidence of Lyme.

- Individual property owners are encouraged to take protective measures for themselves, family and guests.



- Additionally, 'tick tubes' which impact mice can be bought, barberry can be pulled out, landscaping modified, etc.
- These measures are too expensive for the Town to undertake on an island-wide scale, but are available to anyone who wants to utilize them.

Question-

I've heard there is a vaccine for mice to stop the Lyme. Why not use it?

- Tick tubes, as noted, are one method.
  - There is no vaccine for mice that is available or practical for widespread dissemination.
  - There has been development of a mouse vaccine that works in a controlled setting. However, the developers state that the practical distribution of the vaccine needs much thought and work. For instance, for Islesboro, aerial distribution might work, but the developers state there would be no guarantee that other animals besides mice wouldn't eat the vaccine pellets, making the program ineffective.
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Question-

What about burning fields to kill ticks?

- This is not as effective as you might think, as most ticks live in leaf litter and undergrowth.
- Burning leaf litter and undergrowth on the forest edge or within the woods poses an unacceptable risk of wildfire, especially with the large amount of blow downs and slash in our woods.
- Obvious limitations proximate to houses where most people are exposed to ticks.
- Huge cost associated with controlled burns in such a developed environment

Question-

I'm not sure sharpshooting is safe.

- White Buffalo's safety record is 100% unblemished and field verified for over 20 years.
- Sharpshooting is safer than culling deer by shotgun due to the specific techniques that have been developed.

Question-

I've always enjoyed bow and arrow hunting on Islesboro, and it's a great activity to teach and involve our family. How will this tradition ever be able to continue if sharpshooting is successful?

- The sharpshooting program would not eliminate all the deer. The herd would be maintained at 10 per square mile - about 140 deer island-wide - still affording a hunting opportunity on Islesboro.

Question-

Won't deer swim from the mainland and other islands making the sharpshooting plan ineffective?

- The sharpshooting plan would also cover neighboring islands, mitigating the threat from local aquatic deer.



- Even if some deer swim from the mainland, it would take a mass swim to repopulate the local herd. Such an event is unlikely. Any swimming deer that reach us would be dealt with easily in the yearly maintenance program.
- Because we are an island, a sharpshooting program will be much more effective than if we were a mainland community. Our isolation is our advantage.

Question-

Won't ticks still come from birds? Mice?

- An occasional bird might drop a tick. However, this is a minor factor when we remember that the ticks lay thousands of eggs after their final blood meal on deer not birds.
- Mice are not the final tick host.
- We can try to eliminate millions of ticks, treat thousands of mice or cull a few hundred deer.

Question-

But there seem to be alternatives to sharpshooting that just might work.

- Opponents to the idea of sharpshooting have often cited selective "evidence" that supports their position. While parts of this "evidence" has some truth, it does not work when one reads the entire study, or reviews the literature available from experts.

Question-

I keep thinking of questions. We should put off sharpshooting until every possible question is answered.

- The entire sharpshooting process is closely coordinated between the Town and the sharpshooters so that questions which arise can be asked and resolved quickly.
- Lyme disease is a public health crisis. Many questions and objections come from a limited individual viewpoint. While these are valid and should be addressed, these concerns are superseded by the overall health of the entire island community. This is one of those times where we should vote for the good of all.
- If we delay, the process becomes more difficult and expensive. We have the support of the Concerned Citizens of Islesboro now, for action in early 2015. If we don't vote for the funds, a sharpshooting cull in the future will be more expensive, and will have to come directly from Town revenues.
- The sharpshooting solution can "die the death of a thousand cuts" if we don't approve it now.
- This outcome would be a huge step backwards.
- If the deer reduction effort fails to reduce tick abundance and associated risk of Lyme disease the deer population can be allowed to return to pre-reduction levels in only a few years. Therefore, this approach is a very low risk initiative, particularly when private funding will be used to assess the relative merits of this management action.

The solution?

There are good answers to the pertinent questions. Opponents will always suggest delays or conjecture that could derail the program. If you hear such a suggestion, please don't accept it at face value. Find the truth.

For further information, please contact any member of the Tick-borne Disease Prevention Committee:

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