# Table 2 - Potential Deer Population Control Methods

| Method | Process | Efficacy | Logistical Constraints | Legal Issues | Cost | Human Health & Safety | Advantages | Disadvantages |
|---|---|---|---|---|---|---|---|---|
| **Immuno Contraception Vaccines** | • use bait to attract deer to designated area<br>• 1st treatment: capture, tag and dose with anti-fertility agent<br>• subsequent treatments: booster agent administered by dart | • 85-90% effective for each deer treated as long as boosters are maintained<br>• 2 doses first year, single dose each year after<br>• 70%+ of females must receive treatment the 1st year. To maintain, must treat 100% of the original 70% | • in order to discharge firearms, permission of landowners within 500 feet is needed<br>• need for boosters requires an adequate number of darting sites<br>• easier to capture for treatment a few does but increasingly difficult to capture a higher percentage of does | • state DEC permit required<br>• Cayuga Heights Village permit required<br>• INAD permit required | • $1000 per deer for 2 years. Additional cost each year after. | • contamination of meat (necessitates ear tags)<br>• possible stray darts | • public acceptance | • 1st treatment requires substantial effort to capture, tag & treat<br>• subsequent booster treatments require repeated effort & cost<br>• locating deer for boosters becomes increasingly difficult over time as deer become wary<br>• no immediate population reduction |
| **Surgical Sterilization** | • use bait to attract deer to designated sites<br>• capture deer and perform tubal ligation or vasectomy | • 90% effective for each deer treated<br>• no booster required | • in order to discharge firearms, permission of landowners within 500 feet is needed<br>• removal to operating site | • state DEC permit required<br>• Cayuga Heights permit required | • $200/deer for first 40 deer plus $20,000 for capital equipment (true cost not known yet)<br>• cost may increase in the future once veterinarian services are no longer donated | • inconsequential | • high public acceptance<br>• single treatment means less effort over time<br>• one-time cost | • capital equipment cost<br>• necessity for surgeons to be on call<br>• captured males represent nonproductive captures<br>• slow long-term population reduction |
| **Contragestation** (use of abortion agents) | • this method of population control causes the pregnant female to abort its young<br>• does are treated each year with chemicals delivered using bio-bullets. | • moderate to highly effective (65 - 100% efficacy) | • an adequate percentage of does (70%+) need to be treated each year.<br>• need sites from which to shoot the deer with bio-bullets.<br>• expensive since deer must be treated each year. | • permit is needed for firearm discharge in Cayuga Heights<br>• permission of neighbors within approximately 500 feet needed<br>• DEC approval needed to treat deer with chemical | • $300 per deer per year for bait and labor<br>• additional capital equipment costs for biobullet rifle | • not an issue | • deer can be treated once a year during the winter | • no immediate population reduction<br>• narrow window of treatment<br>• does must be treated every year<br>• negative public perception<br>• need multiple bait sites |

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| **Bait & Shoot** | • use bait to attract deer to designated sites<br>• use bow & arrow, shotgun, or rifle with silencer<br>• shoot from elevated stands or blinds to eliminate stray bullets or arrows | • 100% effective for each deer treated<br>• no boosters required | • in order to discharge firearms, permission of landowners within 500 feet is needed | • state DEC permit required<br>• Cayuga Heights Village permit required<br>• permission of neighbors within 500 ft. is required | • $300 /deer<br>• potential for additional cost for law enforcement officers | • safe when properly managed | • immediate population reduction<br>• cost effective<br>• effective way to quickly reduce population in a small area like Cayuga Heights | • low public acceptance<br>• noise of gunfire could cause concern |
| **Bait & Shoot to reduce herd, followed by Surgical Sterilization of remaining population** | • use bait and shoot for immediate population reduction<br>• use surgical sterilization to further reduce population | • 90 - 100% effective for each deer treated<br>• no booster required | • in order to discharge firearms, permission of landowners within 500 feet is needed<br>• some deer removed to a field hospital site | • state DEC permit required<br>• Cayuga Heights permit required | • $200 - $300/deer plus capital equipment costs<br>• potential for additional cost for lawn enforcement officers | • safe when properly managed | • immediate population reduction<br>• reduced sterilization cost because number of deer to be treated has been reduced<br>• effective for population reduction in a small area like Cayuga Heights for population reduction | • capital equipment cost<br>• after bait and shoot remaining deer are likely to be difficult to capture |