

Safely Using Lasers for Bird Scare

By Jared Marley, Margo Supplies Ltd.

Lasers are becoming a more commonly used tool for bird deterrent work and oil and gas locations across Canada. Lasers are an effective addition to robust wildlife control systems. However, the safety hazards lasers create must be considered.

Small and affordable low-powered lasers are safe and effective. They provide best results in use against Canadian Geese and Ravens and have some effect on most other bird species. It is important to remember that bird control lasers are a relatively moderate deterrent and should be combined with pyrotechnics, scare cannons, visual deterrents, and falconry whenever possible. Always vary scare tactics to prevent habituation.

Safety and Liability Concerns

Class 3B lasers (over 5mW power) can cause permanent eye damage to workers or flash blindness to airplane pilots. Class 3B lasers can cause these hazards up to several kilometers away. Keep in mind that lasers can reflect or refract off water, metal, or even wet grass and shine in unintended directions. Additionally, there are concerns that high-powered lasers may cause permanent injury to wildlife.

Regulations

Health Canada prohibits the advertisement and sale of handheld lasers Class 3B (over 5mW) lasers. These have been determined to cause an unreasonable hazard to human health and safety under the Canada Consumer Product Safety Act.

<https://www.canada.ca/en/health-canada/services/health-risks-safety/radiation/everyday-things-emit-radiation/lasers-hand-held-pointers.html>

Permanently mounted lasers above 5mW may be permitted by Health Canada but Alberta requires the operation to register these devices with the

Province as a “Radiation Emitting Device”. Other Provinces may have similar regulations.

<https://www.alberta.ca/register-radiation-equipment.aspx>

Transport Canada requires users planning on shining lasers into navigable airspace to file a Notice of Proposal to Conduct Outdoor Laser Operations. Additionally, Transport Canada prohibits any laser to be used in a way that may create a hazard to aviation safety. Please note that 3A lasers (under 5mW) do not have enough power to shine into navigable airspace in most situations.

<https://tc.canada.ca/en/aviation/aviation-security/use-hand-held-lasers-legally-safely>

Margo Supplies Laser Recommendations:

Class 3A (under 5mW) lasers are affordable, safe, and effective. These lasers do not pose a significant risk to operations or potential to cause unintentional eye damage to workers. Do not use high-powered lasers stronger than 5mW.

Any laser manufacturer should be immediately able to provide you both the class of the laser and the power rating. Remember: Class 3B Lasers over 5mW in power can pose a significant safety hazard and are subject to various regulations.

Low powered have a very limited range in broad daylight. If you can get over 50m of range in broad daylight – the laser is likely over 5mW in power.

Never shine a laser directly at wildlife. Laser light should be used to slowly approach the target animal and herd them in the intended direction.

Create a Standard Operations Procedure (SOP) for Laser Safety that includes awareness of range, reflection potential, and consequences of using high-powered lasers.

Read more about lasers on our blog

here: <https://www.margosupplies.com/ca-en/how-effective-are-bird-lasers/>

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