

Guidelines for the Safe Use of Shotguns in Bird Shooting and Scaring on Orchards

These guidelines were compiled by the Dunedin Branch of the Occupational Safety and Health Service in consultation with Central Otago Fruit Growers, representatives of the New Zealand Fruitgrowers Federation (Otago) and representatives of the Dunedin, Alexandra and Cromwell Police. The guidelines contain some practicable steps that can be taken to reduce the likelihood of shotgun accidents to shooters and other people working in orchards.

1. Employees to be licensed

Ensure that those employed for this work have a responsible and safe attitude and are licensed under the Arms Act 1983.

2. Training of employees

All licensed firearm users receive some theoretical training in the safe use of firearms. This training alone will not be adequate for people who are employed to shoot birds on orchards. It will be necessary to train employees in the following:

- (a) How to safely operate the shotgun they are expected to use. This will include a full explanation of how the safety catch is operated, how to safely load and unload the shotgun and any other relevant details relating to the operation of the particular shotgun.
- (b) The limits and capabilities of the shotgun.
- (c) How to recognise when the shotgun is faulty and when they should cease to use it because of these faults. Employees should also be instructed to report any

shotgun defects immediately to the employer or supervisor.

- (d) How to clean and maintain the shotgun in accordance with the manufacturer's specifications and when this should be done.
- (e) How to apply and work to safe procedures such as those mentioned later in these guidelines.
- (f) How to correctly use the hearing protection provided by the employer and when it should be used.
- (g) Ensure shooters can recite the seven basic rules contained in the NZ Police Arms Code. The code explains these rules in detail and gives additional guidance on practical firearms safety. A copy of the code should be made available for shooters, and employers should also familiarise themselves with it. The code is available free from the NZ Police. The seven basic rules are:
 - (1) Treat every firearm as loaded.
 - (2) Always point the firearm in a safe direction (never at a person, near dwellings or roadways).
 - (3) Load a firearm only when ready to fire.
 - (4) Identify your target.
 - (5) Check your firing zone.
 - (6) Store firearms and ammunition safely.
 - (7) Avoid alcohol or drugs when handling firearms.

Specialist advice and assistance with regard to this training can be obtained from the Mountain Safety Council, local police and gun clubs. The gun clubs and contact names within your area are: Alexandra Clay Target Club (Michael Bennie), Cromwell Gun Club (Lex Jocelyn), Roxburgh Gun Club (Daryl Middlemass) and Clyde Gun Club (Mal Rabbitt).

3. Use of vehicles

When riding four-wheelers or motorbikes, the shotgun should be unloaded. A suitable pouch or carrier should be provided for carrying firearms on this type of vehicle. Never shoot from a moving motorcycle or four-wheeler. Shooting from a cherry picker must also only be carried out when it is stationary.

4. Type of shotgun

The 12-gauge Club 7 target cartridge commonly used in bird shooting is not suitable for use in most semi-automatic shotguns, particularly older semi-automatics. The use of single-shot, side by side, or over and under shotguns is recommended. Shotguns used for bird shooting should be more open choke than closed as this will assist the shooter to hit the birds and reduce the range of the shotgun. A choke of no more than 3/4 is recommended.

5. Shotgun maintenance

Ensure that the shotguns employees are required to use are in good condition. Shotguns should be regularly serviced to the manufacturer's specifications by a competent person. Where there is doubt about the safety of a firearm, it should be checked by a competent gunsmith. Where a shooter uses their own shotgun while employed as a shooter, the employer should ensure that the shotgun used is adequately maintained and that the shooter is fully trained in how to use it.

6. Protecting people in vicinity

Develop safe procedures that set out the intended methods for ensuring that bird shooters do not accidentally shoot fruit pickers and other people in the vicinity.

If practical, the pickers should be totally excluded from the blocks being shot. If this is not practical, then a system should be set up which ensures that a safe separation distance between shooters and pickers is maintained.

A minimum of 100 metres separation distance between shooters and other people should be maintained at all times shooting is being carried out.

Please note that this safe separation distance of 100 metres is recommended only for the 12-gauge Club 7 target cartridge. Any increase in the power of the cartridge or size of the pellets will require a greater separation distance. Such safe procedures should be set out in writing and be brought to the attention of all people who work on the orchard.

7. Warning signs

Place temporary signs, which warn shooting is being carried out, at entry points to the blocks being shot. These signs should also advise people to keep out of the area and the times that shooting is carried out. The signs should be placed prior to the shooting being carried out and removed when shooting is finished by the shooters.

It may also be practical, where shooters are operating in the same block as pickers, to place coloured cones at the end of each row being picked. This will help to alert shooters to the presence of pickers.

8. Timetable shooting

Timetable precisely the times when shooting will be carried out and advise all staff of these times. It will be appropriate to put this information in writing and advertise it on staff notice boards, etc. When shooting is to be carried on outside these predetermined times, it will be necessary to advise staff concerned.

9. Emergency procedures

In consultation with employees, set up emergency procedures to apply in the event of any person being seriously harmed while using a shotgun. This should include a plan which covers when to search for a shooter who does

not report back at the end of their shooting stint.

10. Hearing protection

Shotguns generate high peak levels of noise (between 150 and 155 dB¹), and since this level exceeds the limit in the Health and Safety in Employment Regulations 1995, the noise is a significant hazard.

To protect their hearing, protection of at least Grade 3 earmuffs, should be provided for and worn by bird shooters and all people within 10 metres of the shooter.

The hearing of shooters should be monitored by an occupational health nurse or another suitably qualified health professional annually. Monitoring of employees' hearing at the end of the working day will help to determine the effectiveness of the hearing protection used, when this hearing level is compared with a reference hearing level obtained by measurement at the beginning of the working day (after at least 16 hours of quiet).

¹ Based on measurements taken by OSH in Otago in November 1996.

If the safe separation distance of 100 metres is maintained, then other people working in the area need not wear hearing protection, since the noise at this point will have dissipated to a level that a significant hazard will not exist.

11. Storing firearms and ammunition

Ensure that shotguns are safely and securely stored (unloaded) in accordance with the requirements of the Arms Act 1983 and also ensure that bulk supplies of ammunition are safely and securely stored. It is essential that children do not have access to firearms and ammunition storage areas.

Further information

If further explanation of this guideline or additional information is required, do not hesitate to contact: Dunedin Branch, Occupational Safety and Health Service, 392 Hillside Road, PO Box 537, Dunedin.

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