The Safe Use of Pyrotechnic Devices in Bird Depredation Operations

Purdue University Cooperative Extension Service
The Safe Use of Pyrotechnic Devices in Bird Depredation Operations

The potential for accidents resulting from the use of pyrotechnic materials requires the user to take certain precautions. Essentially, these pyrotechnic materials include crackershells and flares (fired or pistol launched), or firecrackers (used with rope fuse or thrown by hand). Foremost would be the safeguarding of eyesight and hearing from short-range explosions. When using any of the aforementioned devices, the wearing of industrial type safety glasses is required. These may be special safety glasses, shooting glasses, or prescription eyeglasses with safety lenses. Either muff style or earplug type hearing protectors will also be worn.

Certain common-sense precautions will minimize the danger of close-at-hand explosions. With pistol launched projectiles for instance, it is imperative that they be held at arm's length when fired. Shotgun barrels used to fire crackershells must be cleaned at least once daily and more often if fouling is heavy. It is absolutely essential that persons using crackershells make certain that all shells launched have exploded properly. The accumulated residue, besides causing rust problems, might retard the flight of the explosive charge or cause it to lodge in the bore. Under some field conditions it may be simple to keep tract of the explosions of rounds fired, but certain operations involving several shooters in close proximity may require that each person check the bore of his shotgun after each shot. Do not chamber another round, crackershell or live ammunition, if the possibility of a bore obstruction exists. Firing a round in a plugged bore may result in severe injury to the shooter and damage to the weapon. When the use of numerous crackershells is anticipated, it is generally more desirable to use single barrel break-action arms, as these are the easiest to clean and inspect. Accumulated powder residue will necessitate the daily stripping and cleaning of the actions of repeating type arms when used regularly to fire crackershells. Devices ignited by hand, such as the Scram rocket or M-80 firecracker, pose an additional threat in that the user is more exposed to injury from a premature explosion. Use caution when lighting fused devices and avoid the use of those materials with shorter than normal or damaged fuses.

The danger of fire is real when using some pyrotechnic materials near buildings or dry vegetation (dry grainfields, grasslands, or woods with dry litter accumulation). A "fizzle" or slow burning in a crackershell, rocket, or flare could become a real problem if it happened to be fired at a low angle over any combustibles. The projectile should be directed as close to the offending birds as possible while maintaining an angle of fire that would prevent the projectile from endangering combustible
fields, woods, or buildings. Persons using pyrotechnic devices for the first time should fire practice rounds in safe areas to gain familiarity with the flight characteristics of each projectile. In most situations, a fire extinguisher and shovel would constitute minimum fire fighting equipment. The presence of high value property at the hazing site, homes in a city bird roost situation, etc., may warrant making arrangements for appropriate fire fighting equipment to be at the scene or to be available on short notice. If fire hazard is extreme, do not use pyrotechnic materials.

Every precaution must be taken to prevent these materials from landing or exploding near fellow workers or bystanders. When using those devices launched from shotguns or pistols, all rules of firearms safety should be observed. Special care should be taken to avoid the inadvertent substitution of a live round for a crackershell or a blank propelling charge.

CONSULT STATE AND LOCAL LAWS BEFORE APPLYING CONTROLS