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USING SOUND, VISUAL, AND TACTILE PRODUCTS TO REPEL BIRDS

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Abstract: Birds are typically thought of as beautiful, graceful, tuneful creatures by the general public. However, there are many reasons to control birds. Birds and their droppings can create unsightly visual conditions and an unhealthy atmosphere that promotes disease transmission. In addition, cleaning costs including time spent, and property, equipment, or product damage can cause financial loss. Some bird control products, though widely used, are not suitable in many situations. For environmental and safety reasons, poison perches, poison grain and shotguns may not be ideal choices under certain circumstances. Because of high cost and unfeasibility, netting and spikes may be inappropriate. However, effective solutions do exist. These alternatives include sound, visual, tactile products or a combination of the 3. This paper details how effectiveness can be improved with careful preparation, planning, and implementation using these various products.

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Key Words: birds, control, disease, product synergy, repellents.

Bird control is essential for a number of reasons. First, bird droppings are unsightly and unappealing, and can cause dangerous working conditions. Second, birds and their droppings may carry a number of diseases, some even fatal. In fact, a large number of transmissible diseases have been associated with birds and their excrement. Birds are destructive to property, equipment, and merchandise, which can lead to large financial losses. Cleaning crews, related equipment, and time spent, cause large financial outlays. They may halt operations and make repairs necessary by entangling themselves in machinery or downing power lines. Birds consume various feeds, and often spoil inventory or packaging with excrement. Also, the United States Department of Agriculture (USDA), Occupational Safety and Health Administration (OSHA), local health boards, and other governmental organizations cite companies for bird droppings. Companies that fail to correct problems can be fined or shut down. Additionally, birds may set off motion detectors, causing expensive false alarms.

While both the problem and the need to solve it are easily recognized, solutions are less evident. Many bird control products, though still widely used, are not suitable in many situations. For environmental and safety reasons, poison perches, poison grain, and shotguns may not be ideal choices. Non-lethal, non-toxic, ecologically safe, and environmentally sound solutions are preferred. Netting and spikes may be inappropriate when dealing with bird control in large buildings, for cost and feasibility reasons. Physical accessibility to perches and nest sites often poses a problem in using these products. Birds may also drop leaves, twigs, mud or garbage into the "fingers" of the spikes to build up a stable nest base, rendering the product ineffective.

Fortunately, effective solutions do exist. These alternatives include sound, visual, and tactile products, each with

its own capabilities. Often these approaches can be used in combination to enhance effectiveness.

Sound Products

Many different types of sound repellents are available. This is fortunate because no 2 situations are exactly the same, and therefore rarely have exactly the same requirements or restrictions. Ultrasonic units are available for enclosed or semi-enclosed locations that require sound inaudible to humans. For outdoor areas, sonic units are available in a wide range of coverage capabilities. For example, a landfill or a feedlot would require a stronger unit than a homeowner's yard.

Sonic units that simulate bird distress calls are popular - they cause the birds to think that other birds are in trouble in the area, and therefore the area is not a safe place to stay and roost. One recent development is the actual recordings of species-specific distress calls. Because each bird species has its own distress call, it makes sense that a species-specific repeller featuring actual distress calls would be more effective than a general repeller featuring simulated, synthetic sounds. Other versions of sonic devices create predator bird calls, siren or alarm noises, recorded explosions, or sharp, clapping sounds.

Sound repellents are based on the premise of scaring birds away with noise. Pyrotechnics and other repeating loud noises will startle birds, just as they would humans. However, birds and humans quickly acclimate to repeated sound, to the point where it no longer has an effect. For example, many people have learned to sleep through the back up alarm sound of the garbage collection truck each morning. The key to long-term effectiveness of any sound device is change. If frequency, sound patterns, loudness, intermittence, and other variables are unpredictable, birds cannot acclimate to a constant situation.

Visual Products

The key to long-term effectiveness of visual devices, just like sound devices, is change. Some products feature life-like movement. One visual device, developed in Japan, is a large sphere with 4 holographic eyes that appear to move. The eyes seem to follow you as you move your head or look at the device from different angles. To birds, the eyes give the impression of a constantly following predator that knows their whereabouts at all times. Economical copies have been developed, that sell for one-fourth to one-fifth the price of the units with holographic eyes. The copies feature silver paste-on eyes that reflect light, but do not appear to move. Based on case histories, the originals appear to be considerably more effective than their inexpensive, lower grade, non-moving counterparts, but both types satisfy specific needs.

Tactile Products

Tactile products, most often a sticky substance, are another method of repelling roosting birds. As long as the product is applied generously and consistently to all current and potential roosting areas, it is effective by virtue of creating an uncomfortable roosting surface. The birds simply do not want to contact the tacky substance. Different formulations, liquid or gel, are appropriate for many different situations, such as trees, shrubbery, ledges, beams, window sills, gutters, cornices, roof lines (perimeters), and air conditioners.

The substance does lose its tackiness, and therefore effectiveness, after approximately 1 year, so old material does need to be removed and new material reapplied. However, most buildings or facilities require periodic maintenance anyway, and application of the tactile product can be done at this time. Removing dried material can be easily accomplished with solvents or mineral spirits, kitchen cleanser and a wire brush or putty knife.

ENHANCING BIRD CONTROL EFFECTIVENESS

Bird control is improved with careful preparation, planning, and implementation. Effectiveness is improved through evaluation of the bird problem, cleaning of the infested area prior to product installation, and synergy of multiple products working together.

Surveying the nesting, feeding, and roosting habits, entryways and exits, and identifying the appeal of the current roosting place (food, warmth, or shelter) is helpful. Field evaluation gives insight into where to place products, and when to have sound devices functioning at full volume or maximum frequency (if this is not possible on a constant basis).

Ridding the infested facility of any nests, droppings, dead birds, and fledglings (where legal) will reduce the incentive for birds to return. The entire program will have greater effectiveness if cleaning, and subsequent installation of products is performed before bird use begins. It is easier to keep birds away than to try to repel them once they have already begun use of a site.

Synergy is using several products together to achieve greater effectiveness than possible when using 1 approach alone. Sound, visual, and tactile products will each aid in the effectiveness of the other, because several senses of the bird are triggered.

CONCLUSION

No 2 situations are exactly alike — variables are many. In addition, bird control is not an exact science. What is effective in 1 situation may be less so in another. With each of the 3 product options discussed (sound, visual, and tactile products) there are capabilities, limitations, and suggestions to allow users to take full advantage of each product. Synergy is extremely important and provides a key element that should enhance finding solutions to bird control problems.