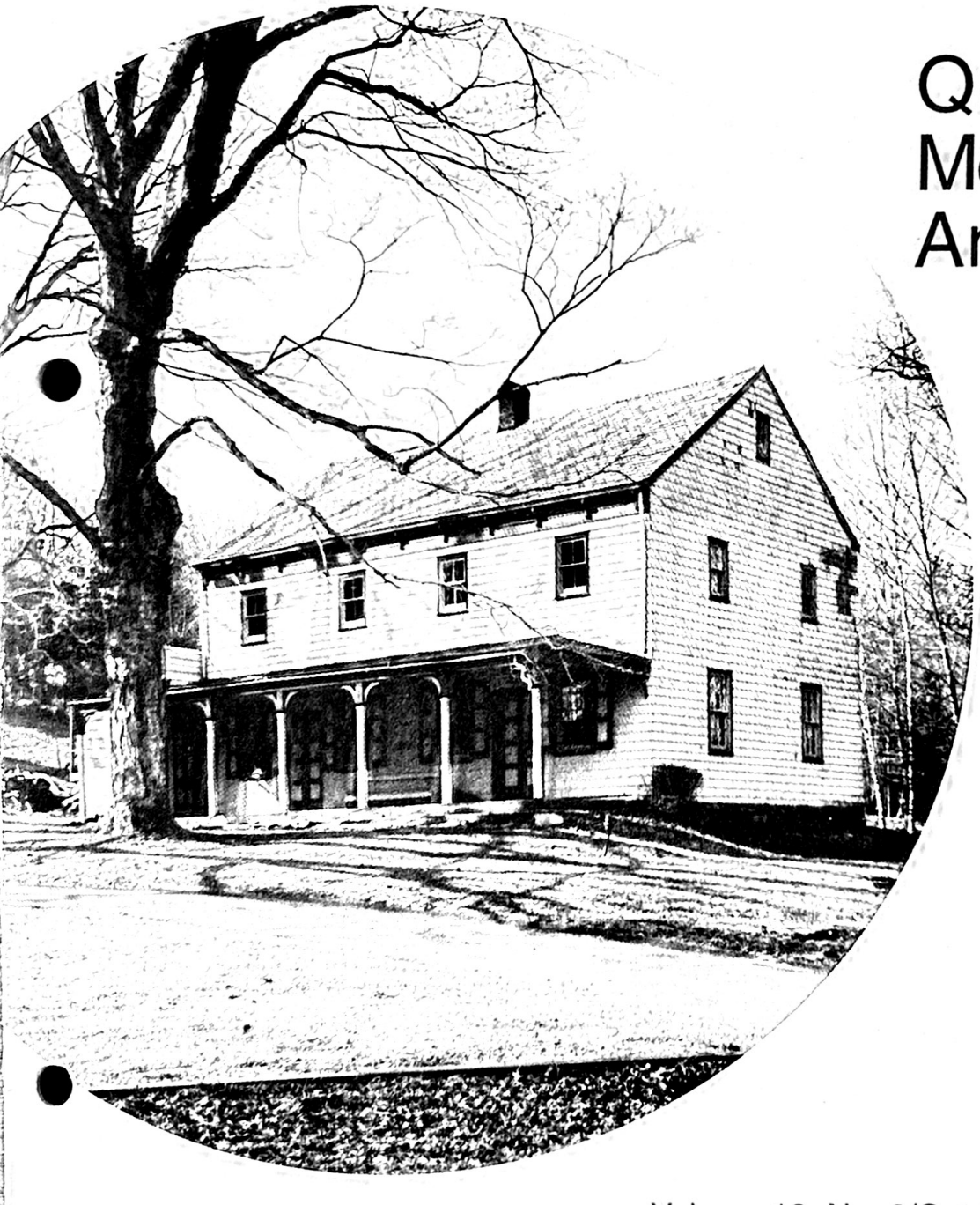
New York Landmarks Conservancy

Common Bond



Quaker Meetinghouse Architecture

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Technical Tips: Bird Control

Whether accomplished by using plastic owls, sharp objects, or mesh, preventing birds such as pigeons, starlings, and sparrows from nesting and roosting on a religious property is a formidable task. The ornate carvings, sheltered niches, and recessed ledges of these buildings tend to attract birds whose droppings (called guano) are both unsightly and dangerous, containing fungi and bacteria that cause serious diseases in humans. Moreover, these acidic droppings stain and corrode building materials such as masonry and stained glass causing costly damage. Water-soaked nests and mounds of droppings may also lead to freeze-thaw damage of porous masonry and nests may block air vents, create fire hazards, and harbor parasites like fleas and ticks that can infiltrate the building.

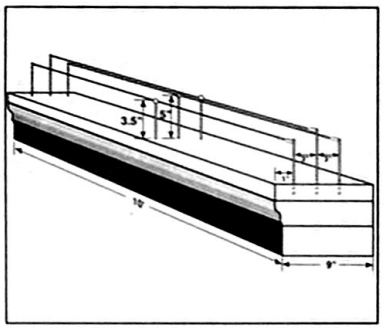
To reduce bird infestation, first determine the location of where they are roosting and consider whether maintenance steps like repairing belfry louvers, replacing broken glass, installing mesh over vents, and regularly cleaning droppings will correct the problem. An important warning is to not assign untrained maintenance staff to clean bird guano. Protect workers (they should wear respirators and appropriate clothing), the building, and the public during the clean up process and dispose of waste according to government regulations. If more sophisticated steps must be taken to reduce infestation, you may want to consider the use of a professionally manufactured and installed bird-proofing system.

Birdmaster Bird Control Systems

Plastic netting is ideal for protecting large areas from birds of all species.

The selection, installation, effectiveness, and longevity of these professionally manufactured systems, however, depends on a variety of factors based on the building's design and the birds' specific roosting locations. Choosing a device or system also requires selecting an installation firm that has experience in bird-proofing historic buildings. According to a study by the United States General Services Administration (GSA), many bird deterrent products and treatments have potentially adverse effects, unacceptable appearances, and limited effectiveness. These type of systems use auditory (electronic distress calls), tactile (sharp projections, chemical repellents, electric shock), and visual (fake owls or snakes, eye-spot balloons) repulsion technologies as well as those that work by eliminating food sources, sterilizing, trapping, and poisoning. Some of these systems, however, have been useful for specific situations and technological improvements can eliminate certain disadvantages.

Based on the GSA study, the Landmarks Conservancy recommends consulting with an architect or building conservator before purchasing a system. These individuals can help you to evaluate the long-term cost-effectiveness of alternative deterrent strategies for your building. It may be necessary to develop specifications and a budget for custom work. The GSA has identified cost-effective systems that meet preservation criteria if carefully selected and installed. One system includes the installation of **tensioned plastic netting** of knotted yarn or twine. This provides a durable, inconspicuous barrier to birds of all species when installed over porticos, niches, capitals, coffered ceilings, and other openings. Another uses **non-electrified wire** (called pin-and-wire or post-and-wire) to protect ledges, cornices, and other projecting elements from pigeons. For more information concerning bird-proofing systems, please contact the Landmarks Conservancy at (212) 995-5260.



Birdwire courtesy of Bird Barrier America

Pin-and-wire systems deter pigeons from landing on ledges.

Acknowledgements: Caroline Alderson and Albert Greene, *Bird-Deterrence Technology for Historic Buildings*, APT Bulletin XXVI/2-3 (1995); Julie Sloan, McKernan-Satterlee Associates.