# Assessment of Management Techniques to Reduce Woodpecker Damage to Homes

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**ABSTRACT** Woodpecker damage to homes and buildings is a widespread and locally severe problem in vertebrate pest control. Woodpeckers may cause an average of $300 (United States currency) in damage to affected houses, resulting in millions of dollars of property damage annually in the United States. However, there is no known, practical, consistently effective technique to prevent woodpecker damage. We tested the effectiveness of 6 woodpecker control techniques available commercially, used anecdotally by homeowners, and recommended by wildlife specialists in different Cooperative Extension publications. These deterrents included Prowler Owls, Irri-Tape$^{TM}$, the Bird Pro Sound System, Scare-Eyes (all manufactured by Bird-X, Inc., Chicago, IL), suet feeders, and roost boxes. We conducted our study in late spring and autumn during August 2003 through December 2004 in the Town of Ithaca, Tompkins County, New York, USA. We evaluated 16 homes with active woodpecker damage, and visited each house about 3 times per week to determine a rate of new woodpecker holes per day. We then placed a deterrent at the house and monitored the rate of new holes per day. Although none of the deterrents that we tested was completely successful in keeping woodpeckers from creating new holes in house siding, homes where Irri-Tape was installed exhibited the greatest reduction in woodpecker damage. Avoiding earth-tone stain and paint colors may be the best long-term solutions for preventing woodpecker damage in wooded areas. Homeowners should avoid using natural-colored stains, as brightly painted houses (white, light blue, pastels) were less likely to attract woodpeckers. (JOURNAL OF WILDLIFE MANAGEMENT 71(6):2061–2066; 2007)

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There are 6 species of wood-pecking birds common to the northeastern United States that have been implicated in damaging homes. These include the pileated woodpecker (*Dryocopus pileatus*), northern flicker (*Colaptes auratus*), red-bellied woodpecker (*Melanerpes carolinus*), hairy woodpecker (*Picoides villosus*), downy woodpecker (*P. pubescens*), and yellow-bellied sapsucker (*Sphyrapicus varius*). Woodpecker damage to homes and buildings is generally believed to be a widespread and locally severe problem in vertebrate pest control (Craven 1984). In 1997 woodpeckers caused an estimated $300 (United States currency) in damage to affected houses, on average, and they may cause millions of dollars in property losses annually in the United States (Belant et al. 1997).

All songbirds, except feral pigeons (*Columba livia*), house sparrows (*Passer domesticus*), and European starlings (*Sturnus vulgaris*), are protected by the Federal Migratory Bird Treaty Act, so lethal control of woodpeckers is rarely an option. Woodpeckers causing damage can be legally killed only with a permit from the United States Fish and Wildlife Service, and in some states, wildlife agency approval is also necessary (Craven 1984). Consequently, nonlethal methods are most often recommended for preventing woodpecker conflicts.

Craven (1984) provided a list of commonly recommended control techniques, including sealing plywood openings, installing visual or auditory scare devices, chemical treatment, installing owl or snake models, setting up alternative feeding sites, covering or repairing damage, trapping, and shooting. However, these recommendations were based primarily on wildlife specialist experience, and few methods have been tested experimentally. Germano and Vehrencamp (2003) also listed methods for controlling the most common types of woodpecker damage: foraging, drumming, nesting, and roosting. Again, these recommendations were based on anecdotal reports and extension publications, not experimental data.

Belant et al. (1997) tested a methyl anthranilate repellent to determine if woodpeckers could be deterred from damaging treated wood siding. Woodpeckers avoided suet treated with the methyl anthranilate, but they were not repelled from treated wood. Woodpeckers do not ingest wood when foraging and excavating cavities, so they were not affected by this trigeminal irritant (Clark 1996).

In eastern Tennessee, Evans and Byford (1983) tested common shaving mirrors at 4 different sites, and also observed homeowner use of artificial snakes and owls in 9 different cases. They found none of these deterrents were consistently effective.

Although numerous methods exist for keeping woodpeckers away from houses, many require an immediate response to woodpecker activity (e.g., squirting water at the bird or making loud noises). We evaluated the efficacy of devices that could be left in place to deter woodpeckers over time, not just for single damage events. Based on a pilot study, we hypothesized that suet feeders may keep woodpeckers away from some houses by providing an alternative food source. In addition, woodpeckers may nest and roost in artificial cavities (Nakamura et al. 1995, Conner and Saenz 1996), so we attempted to quantify whether woodpeckers would use roost boxes, thereby reducing cavity excavation in houses. Our objectives were

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to compare the relative effectiveness of 6 techniques commonly recommended for reducing woodpecker damage to homes.

## STUDY AREA

We conducted our study during August 2003 through December 2004 in the Town of Ithaca, Tompkins County, located in upstate New York, USA, on the southern edge of the Finger Lakes region. We identified 16 homes for this study within the Cayuga Heights and Northeast neighborhoods near Ithaca. Both communities contained stands of northern hardwood forest situated within housing developments. The Village of Cayuga Heights had an estimated population of 3,273 individuals (274–1,140 persons/km$^2$) in 2000 (U.S. Census Bureau 2000). The Northeast community had an estimated population size of 2,655 residents (274–811 persons/km$^2$) in 2000 (U.S. Census Bureau 2000).

## METHODS

We evaluated deterrents during a 2–3-month period in late spring and early autumn, which coincided with the peak of woodpecker activity and homeowner damage complaints in our area. We included houses owned by individuals who initially reported woodpecker damage in 2002 (Germano and Vehrencamp 2003). In addition, we collected addresses of homeowners who called the Cornell Lab of Ornithology to report woodpecker conflicts.

We classified yard types into 4 categories: 1) open grassy: few to no shade trees; 2) lightly wooded: shade trees covering $\geq$33% but $<$50% of the yard; 3) wooded: shade trees covering 50–75% of the yard; and 4) heavily wooded: $>$75% of the yard covered by shade trees.

We recorded the siding type for each home with active woodpecker damage, and classified those as nonwood, clapboard, board and batten, grooved plywood, tongue-and-groove wood, and shakes. We documented the sealant type (paint or stain) and color (earth tones, consisting of dark red, browns, dark greens; or pastel, consisting of pinks, purples, light blues, whites, etc.). We asked homeowners the approximate number of years since their home was last stained or painted, and classified the overall condition of the houses as fair (some wood or sealant deterioration), good (minor deterioration), or excellent (no visible flaws). We recorded the type of woodpecker holes (forage, drum, roost, or nest), description of damage location, and presence or absence of suet feeders. We took photographs of the damage to each house, and made line drawings of the holes caused by woodpeckers at each visit so that we could track changes in damage rates over time.

### Deterrents

We initially evaluated the effectiveness of 6 woodpecker control techniques that were commercially available, used anecdotally by homeowners, or recommended by wildlife specialists. These included Prowler Owls (Bird-X Inc., Chicago, IL), Irri-Tape$^{TM}$ (Bird-X Inc.), the Bird Pro Sound System (Bird-X Inc.), Scare-Eyes (Bird-X Inc.), suet feeders, and roost boxes. Prowler Owls (Fig. 1) were life-sized plastic owls with extendable heavy paper wings. Irri-Tape (Fig. 2) resembles silver reflective streamers. We suspended it from the eaves and siding of a house, often on a string, and allowed the tape to hang freely. Roost-box dimensions were adapted from Shackelford (2000). Scare-Eyes were bright orange and yellow plastic holographic eyes strung on fishing line. The Bird-Pro Sound System played the call of a downy woodpecker in distress, followed by the call of a sharp-shinned hawk (*Accipiter striatus*). We hung suet feeders on metal hooks 1.5 m above ground along the face of the house with woodpecker damage. Feeders were 18 $\times$ 20 cm, constructed of wire mesh, and were accessible from all sides. At the onset of the study, we filled the feeders with peanut butter–flavored suet. However, gray squirrels (*Sciurus carolinensis*) were attracted to the peanut butter suet, and would empty the feeders before our next visit 2 days later. To address this problem, we switched to all-beef suet, which greatly decreased, but did not eliminate, the squirrel activity at the suet feeders.

**Figure 1.** Prowler Owl mounted on a post and tested as a woodpecker deterrent, Ithaca, New York, USA, August 2003 to December 2004.

We chose the deterrent deployed at each house depending on the type of siding, the reason for woodpecker damage (drumming, foraging, nesting, or roosting), and homeowner preference. For a house experiencing drumming damage, we selected from the following control options: the Bird Pro Sound system, Irri-Tape, Prowler Owls, or Scare-Eyes. We only used suet feeders near houses experiencing foraging damage, and we only installed roost boxes on or near homes with roosting or nesting holes.

We tested the 6 deterrents 35 times at 16 different houses with active woodpecker damage. We tested only one deterrent type at a time during each of the 35 trials. For 8 homes, we tested from 2 to 4 different deterrents, switching methods when woodpecker damage persisted. We evaluated a single technique on the remaining 8 homes. We visited each home $\geq$4 times to establish a damage rate (no. of new holes/d) before we installed any deterrent. During this pretreatment period, we recorded the number of new holes drilled by the woodpecker about 3 times per week. Once we

**Figure 2.** Irri-Tape$^{TM}$ suspended from a string as a deterrent to woodpeckers damaging siding, Ithaca, New York, USA, August 2003 to December 2004.

determined the baseline damage rate, we then selected and installed a deterrent.

We designed the roost boxes especially for this study, and they were constructed of 2.5 × 15-cm pine boards. We assembled each box, and then overlaid it with cedar clapboard siding pieces given to us by a homeowner who had downy woodpeckers excavating roost and nest holes in his home. We used a 3.5-cm-diameter hole as the entrance to our roost boxes. We filled the box with cedar woodchips and hung it either directly on the house near the cavity excavation, or on a nearby tree.

We hung suet feeders from iron shepherd hooks at a 2-m height in the yard near the damaged side(s) of the home. If one home face was damaged, we used one feeder; if 2 faces were damaged, we used one feeder on each face. Scare-Eyes were hung from the eaves or siding at the 4 corners of the home, and allowed to sway in the breeze. We placed Prowler Owls on 3-m poles in the yard near the side of home with damage.

We left each deterrent in place from 9 days to 62 days, depending on the season, weather, woodpecker activity on the house and surrounding areas, the ability to establish a damage rate (if any), and homeowner preference. We visited each house during the treatment stage up to 3 times per week and recorded the number of new holes. When we detected woodpecker activity on a house during treatment, we removed the deterrent and installed a different device. We removed the deterrent at the end of each damage season (in Jun during spring and in Nov during autumn). Afterwards, we visited each house periodically at 4–15-day intervals to determine if the woodpecker returned, and if so, we documented a new damage rate.

## Deterrent Distribution

*Prowler Owls.*—We tested Prowler Owls at 6 houses; all were earth colored. Two were sided with cedar clapboards (1 painted, 1 stained), 1 with shakes (stained), 1 with tongue-and-groove boards (painted), and 2 with grooved plywood (1 painted, 1 stained). The average trial duration for each house, including pretreatment, treatment, and follow-up periods, was 36 days. The average length of the treatment period was 21 days. We recorded roost holes at 3 houses. We documented drumming and foraging damage on 5 of the 6 houses.

*Bird Pro Sound System.*—We also tested the Bird Pro system at 6 houses; again, all were earth colored. Four homes were sided with clapboards (3 stained, 1 painted), 1 had cedar shakes (stained), and 1 had board-and-batten siding (stained). On average, we observed each home for 59 days, with an average treatment period of 32 days. We recorded roost holes at all 6 houses, drumming damage at 2 of the houses, and foraging damage at 5 of the 6 homes.

*Irri-Tape.*—We evaluated Irri-Tape 10 times at 7 different houses (3 homes were tested in 2 damage seasons); all were earth colored. Two of the 7 homes were sided with clapboards (both stained), 2 with shakes (1 stained, 1 painted), 2 with grooved plywood (1 stained, 1 painted), and 1 with tongue-and-groove boards (stained). On average we observed homes for 46 days, with an average treatment period of 31 days. We documented roost holes and drumming damage at 5 of 7 houses, and foraging damage occurred at all 7 homes.

*Suet feeders.*—We examined suet feeders 10 times near 8 different houses; all were earth colored. One home was sided with clapboards (stained), 2 with shakes (both stained), 3 with grooved plywood (2 stained, 1 painted), 1 with tongue-and-groove boards (stained), and 1 with board-and-batten siding (stained). On average, we observed a home for 53 days, with an average treatment time of 33 days. We recorded roost holes and drumming damage at 2 houses, and foraging damage at all 8 houses.

*Roost boxes.*—We tested this method at only 2 houses due to a lack of suitable conditions, and sample sizes were inadequate for statistical analysis. Both houses were sided with stained clapboards and exhibited foraging, drumming, roosting, and nesting holes. In spring 2004, we first placed boxes on trees around the yard, about 5 m above ground, facing the sides of the house with damage. We then hung one box on a tree facing the south side of the house, about 3 m away from where most of the damage occurred. We attached the other box to a tree about 10 m from the northeast corner of the house. In autumn 2004 we installed a box directly on a second house about 1 m above the front door. We placed the box over a hole that a downy woodpecker was actively excavating.

*Scare-Eyes.*—We tested the Scare-Eyes device at only one house. They were installed on each of the 4 corners of a brown-painted home constructed of grooved plywood. We hung the Scare-Eyes from the eaves so they could sway freely in the breeze. This deterrent caused damage to the siding, and aggravated the homeowner. Subsequently, we did not conduct further tests with this device.

## Data Analysis

We calculated average damage rates (holes/d) for each device during pretreatment and treatment periods, and evaluated differences between the 4 treatments with 6 or more trials (Prowler Owls, Bird-Pro, Irri-Tape, and suet

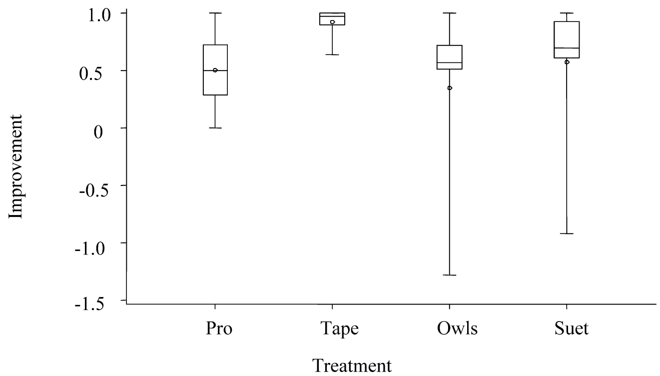


**Figure 3.** Boxplot showing medians, interquartile ranges, and upper and lower limits for the level of improvement for each treatment, Owls (Prowler Owls; Bird-X, Inc., Chicago, IL), Pro (Bird Pro; Bird-X, Inc.), Suet (suet feeders), and Tape (Irri-Tape; Bird-X, Inc.), Ithaca, New York, USA, August 2003 to December 2004.

feeders) with the Kruskal–Wallis nonparametric procedure (Steel and Torrie 1980; Version 8; SAS Institute, Inc., Cary, NC). To assess differences between devices, we calculated an improvement score [Improvement = (pretreatment rate − treatment rate)/pretreatment rate]. We used this formula because not all houses were damaged at the same rate during the pretreatment period.

We first examined boxplots of the improvement score for each of the 4 treatments (Fig. 3). For these boxplots, the value 1.0 indicated woodpecker damage ceased, and 0 indicated no change in damage rates after deterrent installation. We examined the Wilcoxon rank-sum values for the improvement scores to assess differences between the treatment means (Steel and Torrie 1980). We then performed a Wilcoxon signed-rank test in Minitab (Version 13.1; State College, PA). We used a one-tailed test for absolute improvement on each treatment separately, and our null hypothesis was that improvement was >0.5. We performed one-tailed tests because we did not expect damage rates to increase after installation of a deterrent.

## RESULTS

We only observed downy and hairy woodpeckers causing damage to homes, and we attempted to videotape damage activity, but only captured downy woodpeckers on film. Homeowners also most often reported that these 2 species were responsible for the holes in their siding. However, homeowners complained that drumming noise on stop signs, downspouts, and gutters was most often caused by sapsuckers.

The 16 homes with active woodpecker damage included in the deterrent trials were all earth colored; 75% were stained and 25% were painted. The age of the sealant ranged from approximately 5 years to 20 years based on homeowner reports. The primary siding types were cedar shakes, cedar clapboards, grooved plywood, or tongue-and-groove wood. Overall, we classified 13 of the 16 houses in good to excellent condition, and only 3 homes were listed as fair condition with some wood deterioration or peeling sealant.

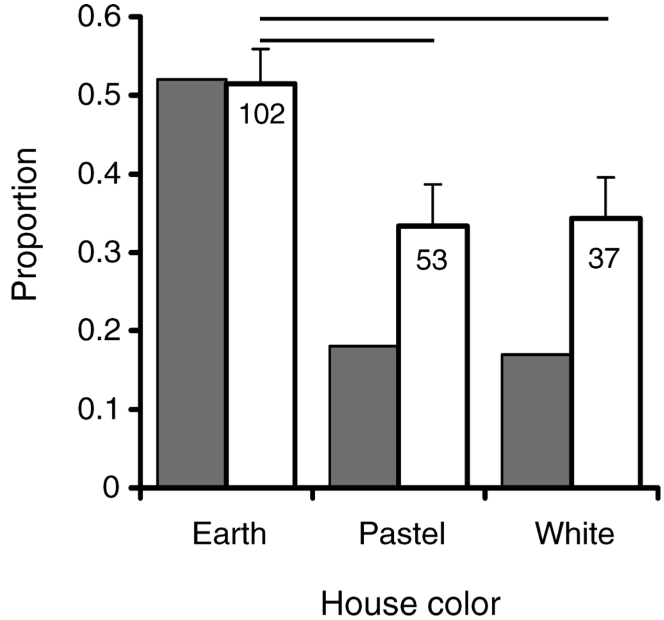


**Figure 4.** Proportion of painted homes with reported woodpecker damage in relation to house color, Ithaca, New York, USA, August 2003 to December 2004. Gray bars show the uncorrected proportion of homes with woodpecker damage, white bars represent least-squares mean proportion and standard error after correcting for house siding and yard types. Numbers above bars represent total number of houses (*n*) examined.

Only one home included in this study had ongoing control for insect problems.

In a broader community survey of woodpecker activity near Ithaca, of the 1,185 homes visited, 394 houses (33.2%) had some form of woodpecker damage, either property damage or nuisance activity (noise). To examine the relationship between house color and property damage, we selected only homes with paint sealant (no houses with white or pastel stain existed) and ran a logistic regression analysis including siding, yard type, and interaction terms. House color affected damage probability ($\chi^2 = 36.5$, $P < 0.001$; Fig. 4). Using least-squares means to make pair-wise comparisons, earth-colored houses ($n = 102$) had more woodpecker damage than white ($n = 37$, $\chi^2 = 17.8$, $P < 0.001$) or pastel-colored homes ($n = 53$, $\chi^2 = 28.5$, $P < 0.001$). Pastel and white houses did not differ ($\chi^2 = 0.72$, $P = 0.40$).

Eight of the 16 homes (50%) with active woodpecker damage were located on lightly wooded lots. We classified 5 homes as being located on wooded lots and 3 houses on heavily wooded lots. There was no obvious association between the number of snags and woodpecker damage. Woodpeckers tended to avoid homes in open grassy areas with few or no shade trees.

All of the devices appeared to reduce woodpecker damage at some homes. Irri-Tape showed the highest improvement score, with the lower quartile range either nearly equal or higher than the highest upper quartile ranges for Prowler Owls, Bird Pro, and suet feeders, which all showed similar improvement rates. The lower limits of both suet feeders and Prowler Owls were well below zero, meaning that some

**Table 1.** One-tailed Wilcoxon signed-rank tests and median improvement scores for 4 woodpecker deterrents, Ithaca, New York, USA, August 2003 to December 2004.

| Deterrent[a] | $n$ | Wilcoxon statistic | $P$-value | Estimated median improvement[b] |
|---|---|---|---|---|
| Bird-Pro | 6 | 11.5 | 0.458 | 0.50 |
| Irri-Tape™ | 10 | 55 | 0.003 | 0.95 |
| Prowler Owl | 6 | 15 | 0.201 | 0.57 |
| Suet feeders | 10 | 40 | 0.111 | 0.69 |

[a] Bird-Pro, Irri-Tape, and Prowler Owl all manufactured by Bird-X, Inc., Chicago, IL.

[b] A value of 1 indicates woodpecker damage stopped completely; a value of 0 indicates there was no reduction in the observed damage rate.

houses exhibited an increase in damage rates after installation of a deterrent. Bird Pro exhibited the lowest median value for improvement. All deterrents had upper limits of 1.0, meaning that after the installation of a treatment device, woodpecker damage ceased for ≥1 home.

We observed a difference in damage rates between treatments ($\chi^2 = 9.83$, $P = 0.020$). Homes with Irri-Tape exhibited the greatest reduction in woodpecker damage ($n = 10$, $Z = 55$, $P = 0.003$; Table 1). To determine if there were any differences in damage rates among the other treatments (Owls, Bird Pro, and suet feeders), we removed the data for Irri-Tape from the analysis. Prowler Owls ($n = 6$), Bird Pro ($n = 6$), and suet feeders ($n = 10$) did not differ in their effectiveness for reducing woodpecker damage rates ($\chi^2 = 1.12$, $P = 0.570$).

## DISCUSSION

We found that Irri-Tape was the most effective deterrent tested, and eliminated damage in about 50% ($n = 10$) of our trials. Other methods tested were far less effective. The Bird Pro Sound System or Prowler Owls each only eliminated damage in 1 of 6 trials. After we installed suet feeders near homes, woodpecker damage ceased in only 1 of 10 trials.

The Bird Pro Sound System was the most expensive of the methods tested and had the lowest improvement score. On 26 April 2004, we installed a sound system at a gray, cedar clapboard house. Throughout this trial, black-capped chickadees (*Parus atricapillus*) and European starlings were seen building nests in holes, which downy woodpeckers had previously excavated into the siding. The birds were active while the sound system played from a stand of yew shrubs (*Taxus canadensis*) 3 m away. On 12 May 2004, we saw a female downy woodpecker preening and foraging in the upper limbs of a red oak (*Quercus rubra*) sapling, 5 m directly above the sound device. Although we observed no woodpeckers on the house during the trial, this may be because the starlings had taken over the location where woodpeckers preferred to excavate their nest holes.

At a house with brown board-and-batten siding, we observed pairs of both black-capped chickadees and house sparrows using old woodpecker holes during early spring 2004. Then we saw a pair of downy woodpeckers excavating holes into the house. The Bird Pro Sound System was installed on 8 April 2004, and we set it to play every 10–15 minutes randomly during the day. Within 8 days, the homeowner heard woodpeckers on the house again. On 19 April 2004, we set the device to play at intervals of 5–10 minutes. The woodpecker activities continued on this house, and eventually tapered off by the end of April.

Although the effectiveness of suet feeders has been questioned previously (Craven 1984), there are few experimental data available. The success of suet feeders may depend on the type of damage inflicted. If a house was being attacked by birds in search of insects, suet feeders could reduce woodpecker foraging damage in some cases. However, if woodpeckers excavated roosting, nesting, or drumming holes, suet may actually attract the birds and result in greater damage levels. This leads to the (untested) hypothesis that if we placed suet at a house with no previous damage or woodpecker activity, the potential for woodpeckers to attack the siding may be increased.

Jasumback et al. (2000) stated that the best way to prevent woodpecker damage to the eaves of a building is to install plastic netting (1.9-cm mesh) approximately 5–7.5 cm from the side of the structure. The netting can be attached to the overhanging eaves and angled back to the siding. Unfortunately this method is expensive and unsightly, and seldom used by homeowners.

Stemmerman (1988) evaluated techniques for preventing woodpecker damage to wooden utility poles in Missouri, USA. Two years after installation, plastic netting attached directly to poles failed to exclude woodpeckers at 72% of active damage sites. He noted that metal hardware cloth wrapped around poles was presumed to be 100% effective for repelling most woodpecker species; however, pileated woodpeckers were observed to cut through the wire mesh. Stemmerman (1988) also encouraged utility companies to repair lightly damaged poles. OsmoWeld® (Osmose Company, Buffalo, NY) is an epoxy resin that forms a strong bond with wood, and restores 85–100% of the pole's original strength. The epoxy is hard enough to resist woodpecker attack, but may be sawed or drilled. This material may have additional applications for repairing woodpecker cavities in homes or other buildings.

Birds other than woodpeckers may be attracted to a home's siding. Throughout the study, we recorded black-capped chickadees and house sparrows flying from, and bringing nesting materials to, old woodpecker holes in homes. We saw chickadees tapping on homes and even placing sunflower seeds into holes in house siding. Before installing devices, it is very important to ensure that woodpeckers are causing the current damage to the house.

Homes sealed with earth-tone paints experienced significantly more woodpecker damage than those painted with bright pastel or white colors, after we adjusted for siding and yard type (Fig. 4). In our study areas, all homes that we observed with stain sealant were earth colored. Twelve of the 16 houses (75%) with active woodpecker damage evaluated during our deterrent trials were covered with earth-colored stains, and the remainder had earth-toned paints. It is clear from our observations of nearly 400 homes with reported woodpecker conflicts near Ithaca, New York, that homes sealed with earth-colored stains or paints are at greater risk of woodpecker damage than those with brightly colored paints.

Throughout the study, we experienced several limitations. The first major hurdle was finding a reliable way to record woodpecker damage to each house. We initially set up video cameras to record woodpecker visits to homes. However, after we viewed many hours of video footage from several houses, we saw only 2 or 3 minutes of woodpecker footage. We finally determined that we could count new woodpecker holes on a semi-daily basis. Although this count was used to evaluate damage rates, there were some inherent problems with this method as well. A woodpecker does not always leave damage each time it taps on a house. The sound may be heard by the homeowner, but the daily tally of new holes would be unchanged.

We found a limited number of suitable homes with active woodpecker damage for testing devices. Replicating this study with larger sample sizes may reveal that roost boxes could be a promising deterrent for woodpeckers excavating roosting and nesting holes in house siding. In addition, other new and commonly recommended solutions to reduce woodpecker damage should be experimentally evaluated.

Two hypotheses that require further study include 1) if woodpecker activity on a home is prevented at the onset, are the chances of deterring the bird from damaging a house significantly greater, and 2) will a combination of deterrents applied as soon as a woodpecker is first heard on the house, or as a preventative method at the beginning of the damage season for homes commonly impacted, be more effective than Irri-Tape? We encourage further evaluation of techniques for reducing woodpecker damage so that timely and reliable information can be provided to homeowners experiencing property damage.

## MANAGEMENT IMPLICATIONS

Irri-tape was the only device we evaluated that exhibited consistent and significant reductions in woodpecker damage. However, even Irri-Tape failed to completely eliminate woodpecker damage in 5 of 10 trials. Appropriate home construction and color selection may be the best long-term solutions for preventing woodpecker conflicts. Homeowners living in wooded areas should avoid natural stains because brightly painted houses (white, light blue, pastels) are less likely to attract woodpeckers. If woodpecker damage and costly repairs continue, it may be necessary to cover the home exterior with vinyl or aluminum siding. It is important to proactively reach contractors and homeowners so that building materials and colors that are less attractive to woodpeckers will be used at wooded home sites with a high probability of woodpecker damage.

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