

Boat Care that's for the Birds



Cleaning pelican poo and other bird droppings off boom covers, decks, and docks is a dreaded task. We tested a host of bird deterrents over six months to determine the best type for keeping waterfowl at bay.

The best anti-fowlant strategy for your boat is a multi-product approach.

When U.S. Airways flight 1549 ran into a flock of birds in January 2009 and pilot Chelsey Sullenberger famously crash-landed the Airbus A320 into New York's Hudson River, the issue of bird and human interaction became front-page news. Though sailboat owners face much less devastating consequences, our interaction with the avian community is nonetheless problematic. As *Practical Sailor* described in the April 2008 issue, guano and other bird scat not only can cause maintenance headaches but they can be damaging to boats, particularly those left unattended. Most readers are familiar with these problems, and—as we've found—nearly every boat owner has a story about his battle with the birds.

Practical Sailor witnessed a wealth of interest in this topic with our last complete test of bird deterrents. The May 15, 1999 report hatched a sufficient volume of comments to fill a followup article in the Feb. 1, 2000 issue.

Why so much fuss about a little poo you might ask? Well, despite the negative connotations of the term “bird brain,” it turns out that birds can be resolute foes in the battle to keep your boat clean. Experts assert that birds adjust quickly to uniform movements or noise patterns, so visual and aural devices will affect them

only temporarily. And, it's proven that if there's a food source near a boat's berth (fish, oysters, shrimp, crabs), most birds will endure significant hardship simply to feed. Further, birds feeding will very likely attract other birds, compounding the problem.

With some new products on the market, *PS* set out to conduct a test of different bird repellents to determine which methods prove most effective for keeping these fouling fowl off boats. Though there are only a handful of manufacturers making such devices in the U.S., there are dozens of products marketed as bird deterrents. And, unfortunately, this array doesn't lend itself to easy comparison. The situation is beyond apples and oranges; it's more like an entire fruit bowl.

A LITTLE CONTEXT

Bird repellents fit into four basic categories: acoustical repellents, visual repellents, biochemical repellents, and those that use physical exclusion. We chose to focus primarily on visual devices as

these are the type most common on sailboats, and in many cases, they're the easiest and most economical to obtain and install.

Many marinas and waterfront businesses often rely on strung monofilament fishing line to deter birds from roosting or frequenting their premises (an instance of physical exclusion). Without question, this is the most economical approach. But, for sailors, setting up and taking down yards and yards of fishing line every time you use your boat can be cumbersome.

Within each basic category is a variety of product styles, and there's good reason for this. Many experts on the topic agree that bird deterrence is most effective when different methods are used in

PS testers mounted more than a dozen bird repellents, like the WhirlyBird pictured here, to evaluate their effectiveness over six months.



Photos by Dan Dickison

AS VALUE GUIDE		BIRD DETERRENENTS				
MAKER / PRODUCT	PRICE	EASE OF INSTALLATION	DURABILITY	DESCRIPTION	MAKER CLAIMS	
BIRD BARRIER BIRD-FLIGHT	\$5.40/ft**	Excellent	Excellent	Metal spikes with plastic base	5-year guarantee against corrosion and UV degradation	
BIRD BARRIER SCARE EYE	\$10	Excellent	Good	2" inflatable vinyl balloon with reflective eyes	Threatening to birds	
BIRD BARRIER POLLY-SPIKE 5-INCH	\$9.37/section	Excellent	Excellent	Polycarbonate spikes in 24" sections	Blunt tips of spikes won't injure birds	
BIRD BARRIER DADDI LONG LEGS	\$45-\$55	Good (assembly required)	Excellent	Weighted stainless rods on a Delrin base	Inconspicuous from short distance	
BIRD-X IRRI-TAPE	\$40	Good (time consuming)	Fair	2" wide, 2-mil thick holographic polyester tape	Shimmers and shines, disorienting and confusing birds	
BIRD-X TERROR EYES	\$45	Excellent	Good	Inflatable vinyl balloon with holographic eyes	Menacing predator replica strikes instinctual fear	
BIRD-X PROWLER OWL	\$59	Good (assembly required)	Excellent	Lifesize plastic and Tyvek-paper owl	Protects up to 6,000 square feet	
BIRDOFF CO. BIRDOFF	\$30	Good (assembly required)	Good	Monofilament line with polycarbonate brackets	Decreases bird activity immediately	
BIRD-B-GONE BIRD REPELLER	\$80	Excellent	Fair	Solar-powered, rotating antennae	1-year warranty	
WHIRLYBIRD REPELLER	\$40	Good (assembly required)	Good	Predator-like, bottle-shaped PEHD device with PVC mount	Motion, sounds, reflections work to change birds' roosting and perching habits	
GULL SWEEP	\$40	Good (assembly required)	Excellent	50" aluminum arm with a stainless pin and Delrin base	Makes gulls uncomfortable so they roost elsewhere	
FLY BYE STAINLESS SPIKE	\$4.16/ft	Excellent	Excellent	Stainless spikes and base	Keeps birds from roosting on ledges	
FLY BYE BIRD UMBRELLA	\$27	Excellent	Excellent	14 24" stainless rods mounted on a stainless base	Keeps birds off canopies and other open areas	
BIRD-B-GONE BIRD SPIDER	\$31 (4-foot version)	Good (screws provided)	Excellent	12 24" stainless rods mounted to a polycarbonate base	Scares away large pest birds	

* Also comes in 2-, 4-, and 5-inch-wide version. ** For 8-inch-wide version

combination. One type of device, say a physical exclusion apparatus like a panel of spikes, may work well along a boat's boom, but will be largely ineffective on a broad deck or cabinhouse. An inflatable balloon device with reflective eyes might keep the foredeck clear if suspended between the mast and forestay, but it will have little effect on birds that perch on the spreaders, masthead, or stern pulpit.

These realities made it difficult for us to devise a test that would equitably evaluate each type of device. And, early into our six-month test, it became apparent that the most useful information we could offer readers would be a run-down on the principal kinds of devices coupled with observations and anecdotes about the applications in which they're most effective.

WHAT WE TESTED

PS tested four visual devices:

- **Bird Barrier's Scare Eye:** a bright yellow or black vinyl balloon that measures 24 inches in diameter. It has multiple large eyes with reflective pupils and is designed to be suspended.
- **Bird-X's Terror Eyes:** a bright orange vinyl balloon with holographic decals in the shape of owl eyes. It measures 24 inches in diameter and has attachment points at both the top and the bottom.
- **Bird X's Prowler Owl:** a life-size replica of a great horned owl that mounts on a pole. Its head is molded from hard plastic, and its wings and tail are made of robust paper. The entire device is designed to rotate relative to the wind direction.
- **Bird-X's Irri-Tape:** 2-inch-wide irides-

cent foil tape printed with a holographic pattern. Designed to use sight and sound (it rustles) to deter birds, it also can be strung to form a physical barrier. It comes with metal wire mounts.

Seven physical exclusion devices:

- **Bird Barrier's Polly-Spike:** clear plastic spikes fabricated in interlocking, 2-foot lengths with spikes set every half-inch. The spikes are 5 inches long, and panels come in various widths with two to five spikes.
- **Bird Barrier's Bird-Flight:** 5-inch metal spikes mounted to a narrow polycarbonate base. Spikes are 5 inches long; panels come in 1-foot lengths and span 3 or 6 inches.
- **Fly Bye's Stainless Steel Wide Spike:** 4½-inch, stainless steel spikes clipped to a stainless base, these come in 1-foot lengths.

	FINDINGS
	Protects only immediate area
	Worked while it lasted (30-plus days)
	Protects only immediate area
	Robust construction, but protected only immediate area
	Excessive flapping caused tape to tear early on
	Worked while it lasted (fewer than 30 days)
	Good with seagulls; ineffectual on pigeons
	Decreased bird activity
	Rotates persistently; antennae prone to rust
	Operates as advertised, but requires maintenance
	Rotates well, but protected only immediate area
	Protects only immediate area
	Rods became tangled; protected only immediate area
	Lasted well, but protected only immediate area

- **Fly Bye's Bird Umbrella:** Fourteen 24-inch, stainless-steel rods extend from a flat stainless base, which mounts with screws or can be tied down.
- **Bird Barrier's Daddi Long Legs:** 12 thin, stainless rods mounted on a rotating Delrin base (comes with adhesive neoprene gasket and optional sandbag base); rods have weighted tips. It comes in 4-, 6-, and 8-foot diameters.
- **Bird-B-Gone's Bird Spider:** 12 stainless rods protrude from a central polycarbonate base (in 4- or 8-foot diameters). Antennae ends are bent in a loop and covered with a hard plastic that allows them to move with the wind.
- **Birdoff's Bird Off:** 50-pound monofilament line runs through a series of plastic rail-mounting clips sized for 1-inch tubular rails. It comes in one length, suitable

for protecting 45 feet of railing. And we tested three rotating devices:

- **WhirlyBird Repeller:** clear plastic jug-shaped device that rotates around a central PVC mounting post with the wind. It's designed to resemble a bird of prey with small, dark eyes. It makes some noise when spinning and has reflective tape inside that refracts through the clear plastic even when it's still. (See *PS* April 2008 for review.)
- **Gull Sweep:** A 6-foot anodized aluminum arm with small stiff panels at each end. The arm rotates around a central stainless pin when the wind blows. It can be mounted in numerous ways.
- **Bird-B-Gone's Bird Deterrent:** two antennae rotate steadily around a central plastic base powered by the sun via a 16-inch square, adjustable photovoltaic panel. Antennae are adjustable up to a 5-foot diameter. Several mounting options are possible, and the device works on any angle as well as in low-light conditions. (Two AA batteries can be added to extend operation.)

HOW WE TESTED

We conducted our test at Sunset Cay Marina near Charleston, S.C. This site sits on the marsh-lined Folly River in protected waters, roughly a quarter-mile from the beach. The manager verified that gulls and pelicans are the most frequent nuisance for his customers, but he also told us that other birds frequent the docks and boats there. During our multiple visits to the test site, we witnessed various species of herons, cormorants, black skimmers, and pigeons.

For six months, the devices were deployed on little-used portions of two floating finger piers. We spaced them out in an equitable fashion, grouping like products. We returned intermittently to record and assess the functionality of the test devices. (At the manager's request, the Prowler Owl was deployed on the marina office's second-story balcony to deter pigeons from roosting beneath it.) During the test period, the devices endured storms with plenty of wind, blazing sun, and temperatures that ranged from near-freezing to 86 degrees.



Bird-X Prowler Owl



Bird Barrier Scare Eye



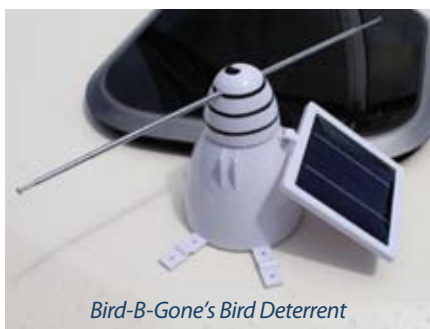
Bird-X Terror Eyes



Bird-X Irri-Tape



WhirlyBird Repeller



Bird-B-Gone's Bird Deterrent

OUR FINDINGS

It is customary for bird deterrent marketers to make claims about the amount of space protected by their devices. Among the physical exclusion devices, the spiked products protected the smallest area. Our testers found bird droppings fewer than 10 inches from each of the spiked panels. These might be effective along the top of a boom or other narrow surface, but you'd need an unwieldy number of them to protect a cockpit, deck, or cabintop.

The three spider-like devices performed similarly. *PS* testers regularly found deposits of bird poo near the outer periphery of each. On two occasions, several of the rod arms on Fly Bye's Bird Umbrella were found tangled,



causing them to be less effective as they projected over a smaller area.

Though the performances of the spider devices were similar, we deemed Bird Barrier's Daddi Long Legs the best of the three because its base allows the device to rotate, the weighted ends of the rod arms accentuate any motion, and it can be mounted on decks, biminis, booms, or rails.

Spaced properly, these devices should adequately protect a foredeck space, a cabintop, or a cockpit, as well as a boom or canopy, but our testers found no easy application for using them in a rig.

BirdOff's Bird Off would seem to have the most versatile application. Unlike the spider-like deterrents, the Bird Off isn't designed to move, but it can be strung along lifelines, rails, or spreaders, above booms and across cockpits or decks to dissuade birds from perching. You just have to allow time for coiling up all the monofilament line and gathering the clips when you're ready to set sail.

We didn't have much luck with two of the visual deterrents from Bird-X. The sections of Irri-Tape that we had tied to a folded bimini were gone in less than a month. Designed to rustle in the wind, the tape did just that, but tore at the knots and fluttered away.

The Irri-Tape did make noise in the breeze and did reflect the light. Had our testers been able to mount it using the wire brackets provided by Bird-X, the product likely would have fared better. We found the Bird-X Terror Eyes deflated and in the water after just three weeks with a tear in one upper seam. The early demise likely resulted from the

fact that testers mounted the balloon using both the top and bottom attachment points, which evidently restricted its motion too much.

In contrast, Bird Barrier's Scare Eye comes with just one attachment point on top, and it was still swinging in the wind after that first month, though it blew away some time during the following 30 days. During the time that they were on station, both the Scare Eye and the Terror Eyes appear to have succeeded in deterring birds from sullyng their areas.

The Prowler Owl had little effect on the pigeons, but it did keep the gulls from roosting nearby. After two weeks in the elements, a rivet on its left wing broke, leaving the owl asymmetrical, but still moving in the wind. After 10 weeks on station, the device blew off its pole mount during a storm and was never found. We recommend a set screw for mounting.

Of the three rotating devices tested, the WhirlyBird Repeller seems the most versatile. It makes a small amount of noise when rotating, and the holographic tape on its central post refracts through the clear plastic. However, after a few months of use, the test WhirlyBird stopped rotating. The inventor explained that this was a result of grit clogging the Delrin bearing and suggested rinsing it with fresh water regularly to keep this from happening. On our final visit, the WhirlyBird was missing the bearing and rotated infrequently.

The Gull Sweep continued to rotate throughout the test, but it didn't prove any more of a deterrent than the WhirlyBird Repeller or Bird-B-Gone's solar-powered Bird Deterrent. The latter rotated impressively, with the solar panel providing sufficient juice even on cloudy days. *PS* testers found it stopped during only one visit, but the telescoping antennae are prone to rust and one snapped off when testers attempted to remove the rust by retracting the antenna.

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 Test devices that used the physical exclusion method included spikes—like the (above left, from top) Fly Bye Stainless, Bird Barrier Polly, and Bird Barrier Bird Flite spikes—and spider-looking products like Bird Barrier's Daddi LongLegs (bottom left).

Bird Battle Tips from the Pros' Nest

We spoke to several marina managers around the country and inquired about their preferred tools in the war on waterfowl. Karen Knull, co-owner and operator of Yankee Point Sailboat Marina in Lancaster, Va., told us that her 105-slip marina occasionally has issues with bald eagles, osprey, seagulls, and one particular great blue heron.

"That heron is a protected species, as are the eagles, so we simply clean up after them," explained Knull. She said that the marina tried using plastic owls in the past, "but it's really hit or miss whether they work." Knull said that about 20 of her customers occasionally use life-like rubber snakes on boat decks or in the cockpit. "Ultimately, we have a lot of customers who like this area for its peace and quiet, and the wildlife is simply part of that, so we all just deal with it."

In Alameda, Calif., Harold Thompson is the maintenance supervisor at the Oakland Marina, which has nearly 500 slips. Seagulls and geese are the main problems, Thompson said. "The geese congregate on one particular dock, and there's not a lot we can do. It's just part of our job to clean the docks, so we spray

it down and clean it up almost every day." To keep avian pests off the marina's equipment such as generators and transformers, the company has invested in a number of Gull Sweeps, which Thompson said work well. For protecting boats, the most successful device he'd seen was a motion-activated sprinkler. (PS found the Scarecrow sprinkler from Nixalite online for \$67, but we haven't tested it.)

Eddy Barr of the Galveston Yacht Basin in Texas said the bird issues at his 500-slip marina are so challenging that they keep one employee busy cleaning the docks for four hours each day. "What we used to have that worked were bird callers...sound-emitting devices, but those really will drive you nuts," Barr told us. In the end, as Barr said, dealing with birds is just part of owning a boat.



One Bird-X product that we received did not fit the test platform, so it wasn't tested. But the approach seems promising for boats kept at a dock where access to power isn't an issue. The X-peller Pro, a 110-volt electronic device, emits sound to deter birds and retails for \$239.

CONCLUSIONS

Successful bird deterrence is a complex business. One device may work well for seagulls and pelicans, but not so well for cormorants and osprey. Another might protect your deck, but not your lifelines or your rigging. And most devices might dissuade waterfowl from roosting for a few days, but if your boat is inactive for much longer, the birds will grow accustomed to most devices, and sooner or later, they'll be onboard wreaking havoc. For these reasons, the most successful defense requires combining different approaches/products. However, the devices are only valuable if they continue to work, and that means they must be durable and stand up to the rigors of the marine environment.

Though our test findings aren't conclusive, they do indicate specific issues to be aware of with several of these products. Bird-B-Gone's solar-powered Bird Repeller was impressive because it continued to rotate throughout six

months, but be advised that the extendable antennae are prone to rust. You'll want to lubricate them regularly to avoid rust build-up. The WhirlyBird Repeller should be mounted above head height and rinsed occasionally with fresh water for best results. And the Irri-Tape might seem a good bet as it can provide visual and auditory deterrence as well as physical exclusion, but you'll want to explore alternate means for securing it to your boat. Bird-X stipulates tying it off or clamping the ends securely. (We recommend the use of packaging tape.) Also, the same shiny quality that spooks birds will make Irri-Tape look like food to underwater animals if it becomes litter in the waterway.

Ultimately, if you want your boat to remain clean, the best approach will involve some mixture of devices. Mark Thorsell of Bird Barrier, concurs. "A combination of products is definitely better," he told us. Among sailboat owners, said Thorsell, the Daddi Long Legs is his company's most popular product.

In our opinion, coupled with either a Scare Eye or a Terror Eye in the fore-triangle and near the backstay, several Daddi Long Legs should protect most areas of your boat if properly attended to from time to time.

And that's the rub. Over the span of six months, essentially every product we evaluated except for the three spike panels exhibited some degradation. With the exception of those panels, you'll likely have to replace all of these products inside of a year unless you take the time to maintain them.

So, what's the solution? Figure out which combination of devices best suits your boat's configuration and location, and then plan on checking in on the setup regularly to adjust the positioning of the products and maintain them. ▲

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