

Dawn, Christmas Day

From the top of the low dune I could see a circular patch of clear sky containing many stars and a waning quarter moon. The fog was a distance off but blackened the surrounding horizon in all directions and I felt like I was looking up from the bottom of a broad clay pot. There was no wind and no sound of waves as I walked onto the deserted Cape Cod beach. For a few minutes the world was utterly still and quiet. A faint orange was already leaking into the blackness to the southeast, and against it I could see the withered stems of *Amophila* grass. A resting bird, probably a mourning dove, flushed from a hollow at the dune's edge. Now from the still bay came the occasional mewing of a gull as I walked slowly on the soft sand, a fine vapor dropping silently from the fog bank onto my cheek. Suddenly, from far out on the water came the keening call of a common loon. Its cry pushed higher and higher into the night sky adding mystery to the blackness of the bay. As I walked slowly on, the orange wash in the southeast faded to yellow. I heard the pounding of wings coming from my right and a flock of about thirty common eiders crossed in front of me, their chunky black bodies briefly outlined against the spreading light before they vanished into the gloom. Other birds hidden in the dead-still murk of the bay announced themselves. I heard the sporadic chortling of brant and the loud, complaining quack of a black duck. Small flocks, hidden by the night but probably eiders, took off from the water with a sound like a sudden rain squall. An occasional tiny wave broke on the sand.

The dune flattened out and I could now see into the vast salt meadow behind the beach. Colors weren't yet discernible but the fog bank holding back the gathering sun had turned a pale blue. Crossing a broad stretch of beach I reached the curved bank of a tidal river as the increasing light coaxed small birds to begin calling from the meadow grasses. Fingers of cloud protruded above the fog and slowly turned a beautiful pink. The world was becoming visible. Around the mouth of the river were the yellowish, peaty beds where eel grass grew in the summer and soft-shelled clams burrowed. The brown strands of dead eel grass harvested by the tide were washed ashore twice a day and lay twisted in short, thick ropes on the beach. Although the tide was now rising, the clear, shallow river was still ebbing, carrying bits of reed and grass on its surface. Opposite the steep sand bank where I stood the river margin was composed of deep brown peat, the accumulated organic decay of uncountable seasons. Crows were

calling inland and gulls mewed and cried from somewhere in the fog. The river became still as its waters reached equilibrium with the bay, then reversed itself and began its long push into the far reaches of the marsh.

The fog on the southeastern horizon was now luminous. I began retracing my steps. The encroaching bay was flat and calm. It was impossible to tell where the water ended and the fog began. The beach's scalloped edge curved away from me and just where it vanished, about a hundred yards ahead, I could see something like a large water bubble formed on the sand. It was a small pilot whale, about ten feet long, lying on its left side, driven ashore by a storm or the strange urge towards "suicide" that periodically infects the species. Its corpse had been preserved by the cold and was intact, except for a tear made just behind the mouth where the gulls had managed to feed. The mouth was ajar and displayed beautiful white, pointed teeth, less than ½ inch in length. Except for its light underside, the whale was as jet black as the depths where it had hunted. Its skin was still tight and of an amazing smoothness, designed to let this beautiful and mysterious mammal move through the water like a dream with each pump of its sickle-shaped flukes. Imagining the whale in life mesmerized me and although I felt regret at its pathetic demise I was grateful for having found it – how often do we get a chance to see such creatures? Reluctantly, I left it to its next stage in death which was to provide food for scavengers. I turned my back on the three gulls standing off a short distance and continued my amble down the beach.

Parallel to the shore was a low ridge of ice formed from the spume of previous tides. The bay had now risen almost to flood and an occasional small wave, hitting this ridge just so, made a noise like feeble applause. I looked over my left shoulder and saw the pale yellow disc of the sun finally breaking through the fog.

-John Maret
January, 2006

Windows: A Clear Danger to Birds
by John Nielsen for National Public Radio

January 3, 2006

No one knows what birds see when they look out at the world, says ornithologist Daniel Klem, but he's sure they don't see glass. He estimates that at least 1 billion birds are killed by flying into windows every year in the United States. "It's a very common phenomenon," said Klem. "Birds are deceived. They just don't see glass as a barrier and this is a problem for them." Klem, a professor at Muhlenberg college in Allentown, Pa., first learned about the "window hit" problem 30 years ago from a teacher. Klem responded by marching into a forest and hanging a bunch of windows from the branches of the trees. Then he sat down and watched what he calls an "appalling" number of collisions. Some birds lived. Many did not. "I've learned very early on that a really short flight from an 8-foot perch can result in death," he said.

Later, Klem watched more than 100 birds hit the windows of a "typical" suburban home in the course of a single year. Then he studied shiny glass office towers, which can kill tens of thousands of birds in a year. It all adds up a yearly death toll of at least 1 billion, he argues, or roughly five percent of all the birds found in the United States each fall. Hardly anybody appreciates the size of the problem, he says. "Nobody intentionally wants to see these birds harmed, and it's just so tragic to see this unintentional source of mortality being ignored," Klem said. Attempts to find solutions to the window hit problem have been few and relatively modest, according to Klem. A major exception can be found on the campus of Swarthmore College. It recently agreed to turn a \$71 million science center into an experiment, by using it to test a new kind of glass designed to ward off oncoming birds.

Julie Hagelin, an ornithologist at Swarthmore, says the college has known for years that it has a bird-hit problem. Hagelin is the unofficial keeper of bird carcasses found on campus. "Typically they find them in the morning when they come to campus," she said. "They find a dead specimen, they wrap it up in whatever they happen to have, a napkin or a plastic bag, and they bring it to me and they say, 'We hear that you're supposed to do something with these.' "

Inside her lab, a big metal cabinet holds a long line of bird corpses, ranging from migratory birds like the

northern parula to local birds such as woodpeckers. Many birds killed by windows get eaten by cats and other scavengers, she says. But even when there isn't any carcass it's possible to tell when there's been a collision. Most birds leave a distinctive smudge mark on the window.

In the mid-'90s, when Swarthmore decided to build a new science center on campus, it briefly seemed like those window marks were about to get a lot more common. The center featured a three-story meeting room made out of clear glass -- an "avian slaughterhouse," says Klem. Alarmed ornithologists invited Klem to speak to the building committee. Carr Everbach, a member of Swarthmore's engineering faculty, says that speech and an unfortunate encounter with a bird helped change the building plan.

"We were about to have a meeting to talk about the problems of birds striking the windows," said Everbach, "and we heard a loud thump and we turned around and there was a bird flopping around on the pavement just outside the window." The building committee agreed to pay for bird-friendly glass, if Klem and Everbach could come up with a design. The challenge was to find a kind of glass that birds could see and people could see through.

Everbach and Klem recommended using so-called "fritted" glass. It's etched with closely spaced rows of small circles. When standing right in front of it, the glass is hard to see through, but Everbach says from a slight distance, the dots don't obscure vision that much. To find out whether the fritted glass is really bird friendly, Everbach outfitted some of the windows with video sensors, called "thumpers."

The thumpers have recorded just two bird hits since the center was finished five years ago, which doesn't prove anything conclusively, since the sensors aren't attached to every window. But Everbach says it's a pretty good hint that the fritted glass is working. Everbach's dream is that one day a glass manufacturer will start selling bird-friendly glass, just as the fishing industry now sells cans of so-called "dolphin-safe" tuna.

Klem shares Everbach's dream, but after spending 30 years fighting this problem he's learned one crucial thing: "If you are going to come up with a solution to this problem, you are going to have to

come up with one that doesn't muck up the way people look out their windows," Klem said. "You start doing that and people are going to be unsympathetic." If nothing changes, Klem says it's certain that the problem of window hits will escalate. He notes that in the next few decades, millions of new homes and offices will be built in the United States alone.



One way to help birds avoid window strikes is to place feeders close to windows -- the birds will stop at the feeder, or at least slow down.

Courtesy Daniel Klem

Here are five tips for keeping birds away from your windows.

1. Put feeders within three feet of windows; at this distance, approaching birds aren't moving fast enough to get hurt.
2. Hang obstacles in front of the glass: tree limbs, strips of cloth or shiny materials, old CDs, toilet-paper rolls, or feathers on a string.
3. Spray the glass with vegetable oil or fake snow to make it opaque. Or stick on plastic wrap. Consider products used on greenhouses to make glass translucent.
4. Put decals—including dots or bird silhouettes—on the outer glass face. Space decals uniformly, two to four inches apart, to transform the window into an obstacle birds will see and avoid.
5. Hang netting, or buy special see-through screens. Also consider installing awnings that can be lowered when you go to bed or raised when you want a view.

To purchase decals, go to <http://www.wpines.com>
For additional information, go to <http://www.rlrouse.com/window-protector.html>

Correction

Two names were missed as part of the birding team at Palmyra for The Big Day: Joe Costanza and Chip Krilowicz. Many thanks for their efforts for the fundraising event!

MultiMedia Projector purchased!

Thanks to the fundraising efforts in the fall, AWS was able to purchase a multimedia projector that can project video, digital photos, PowerPoint presentations etc. The projector is an InFocus brand model X1A. The multimedia projector works much like a slide projector except it can accept input from a variety of sources including computers, camcorders, VCRs, DVD players, and digital cameras. The projector will be a benefit to accommodate guest speakers and members by allowing a larger variety of content to be displayed, enriching the programs offered at the monthly meetings. The projector had its first use by members presenting in the December meeting. In addition to the multimedia projector, the slide projector will still be available.

-David Jacobs

Other Club Events

Program: Burlington County Natural Sciences Club, BCNSC presents, "Feathered Dinosaurs of China" by Bill Gallagher. January 11, 2006

BCNSC meets the second Wednesday of the month, September through May at 7:45pm in Medford Twp. Safety Building, Court Room Union and Jones Sts. (off Rt. 70) Medford, NJ. For more information on BCNSC go visit:

<http://oldsquaw.tripod.com/index.html>

Nature Programs On TV:

Nature: Life in Death Valley

Airs on WHYY January 8th at 8:00pm This episode of Nature shows a visual wonderland, where imposing mountains rise almost 2 miles above sprawling salt flats, and canyons are painted in strokes of blue, pink, violet, and green from sunrise to sunset. This is Death Valley, one of the most inhospitable places on the planet. Nowhere else is a landscape so exquisite yet brutal, stunning yet harsh.

To view a preview go to:

<http://www.pbs.org/wnet/nature/preview.html>

NATURE airs in most markets on Sunday nights at 8:00 p.m. Please check local listings.