Greetings to you and best wishes for 2016! With the spring soon upon us, those of you working to mitigate wildlife hazards at airports are experiencing different patterns of bird migration and wildlife activity depending on your location. Whatever the tasks on your plate, I hope all is well. As far as things go with BSC USA, I am happy to report that things are “Steady as she goes!”

Last September our Canadian colleagues welcomed us to Montreal for the 2015 North American Bird Strike Committee annual meeting. My counterpart from Bird Strike Canada, Mr. Gary Searing, and his colleagues were pleased by the turn out of more than 300 people from 20 different countries. Our Canadian colleagues expressed some concern about the large number of U.S. military personnel in attendance—but they had nothing to fear! The joint steering committee meeting provided a good first step to help increase collaboration between North America’s wildlife strike communities. Topics explored during the joint meeting included ways to better share the technical data and information from our internal databases.

Our North American Bird Strike Conference is truly a forum for broad discussion and engagement in all topics germane to wildlife management. The conference sessions were well attended and generated much discussion. Diverse conference topics included: raptor management, data analysis, new technology, risk assessment, and pure research on methods to deter birds from aircraft. Thoughtful discussions about long-term management projects and how to approach airport wildlife management using an ecosystem-based strategy were well received.

A sidebar meeting occurred while we were in Montreal at the nearby ICAO headquarters that involved our Chair-elect, Sarah Brammell, and Vice Chair, John Weller. ICAO will hold an international meeting in 2017 to address wildlife strike issues, and the meeting will likely focus on best management practices and international wildlife strike data. Our committee leadership is scheduled to meet with ICAO again to further discuss that conference and other issues.

So...steady as she goes! When I took the reins as Chair, our committee began a new leadership succession process. The Executive Committee will turn over in 2016, and we have brought new voices to the steering committee. While we must welcome our new committee members, it is also important to thank those who recently completed their terms and stepped down: Laura Francoeur (Airports), Phil Mastrangelo (USDA) and Cody Baciuska (private industry). BSC USA thanks you all for your timely assistance and advice. Your voices and keen insights will be missed.

Finally, BSC USA would like to extend its heartfelt thanks to our colleague and friend at AAAE—Natalie Fleet. Natalie and her staff worked with us to establish the 2015 conference location and manage conference logistics. I am not sure what we would have done without their assistance in 2015, and we look forward to working with them in 2016 as we plan for our next conference!

Save the date: The BSC Conference will be held from August 9-11, 2016, in Chicago, Illinois. Stay tuned for more information!

Michael J. Begier
Chair, Bird Strike Committee USA
Bird Strike Committee USA Executive Committee

The BSC-USA Executive Committee welcomes your input and insights regarding the organization, its operations and matters of interest to our members. Please feel free to contact the members below with ideas or suggestions.

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AVIATION COMMUNITY – WE NEED YOU!
Cathy Boyles, Communications Chair

Bird Strike Committee USA’s Steering Committee is composed of members from representative organizations with the common goal of reducing and mitigating wildlife hazards to aviation. Anyone who is a member of Bird Strike Committee USA and shares our common goal of enhancing aviation safety is eligible for open Steering Committee positions. (And we’ve made membership free and easy — join us by clicking here).

The Steering Committee currently has open positions for individuals representing the following:

- Federal Aviation Administration (FAA)
- United States Department of Agriculture (USDA)
- Aerospace Industry
- Airlines
- General

We hope you’ll consider nominating yourself or another person. Steering Committee members make a commitment to participate in monthly conference calls and attend two meeting per year (one mid-winter meeting and another during the annual BSC Conference).

For more about the Committee’s positions, roles, and eligibility visit our webpage. You can read all about them in our By-Laws. By the way, we’ve added a new Education and Outreach Standing Committee. Please come join the fun!

HISTORY OF FAA WILDLIFE / AVIATION GUIDANCE
(Part two of a two-part series)
John Weller, Federal Aviation Administration

FAA’s wildlife regulations of today are based on a foundation that began in the 1960s.

Regulatory oversight, aircraft design and operation, and airport management were each insufficient in their own way to reduce wildlife strike risks. Between 1963 and 1968, the FAA Airport’s Division provided five Advisory Circulars (ACs) pertaining to wildlife hazards. The most valued among these—both then and now—provided the cornerstone for all wildlife hazard guidance and mitigation: AC 150/5200-2, Bird Strike / Incident Report Form (November 27, 1965) celebrates its 50th anniversary this year and stands as the most innovative document connecting strike collection and analysis to the reduction of risk from wildlife hazards.

Following the Lockheed Electra fatal bird strike (October 4, 1960) and prior to airport-specific regulations addressing wildlife hazards, Title 14 of the Code of Federal Regulations (CFR) Part 33.13/19, Airworthiness Standards: Aircraft Engines (1965), formally recognized the threat from bird strike impacts. The predecessor to the FAA’s Aircraft Certification division codified bird ingestion standards in this regulation as well as AC 33-1, Turbine-Engine Foreign Object...
HISTORY OF FAA WILDLIFE / AVIATION GUIDANCE (CONTINUED)

Ingestion and Rotor Blade Containment Type Certification Procedures. Standards within these documents have noticeably evolved from the original small bird (2 to 4 oz.) and large bird (2 to 4 lbs.) standards and are now found in 14 CFR Part 33.76, Bird Ingestion.

It wasn’t until 1970 that airport-specific regulations officially recognized animals, albeit no mention was made of risks or hazards. Specific to the National Capitals Airports (i.e., Dulles and Washington National), 14 CFR Part 159.99, Animals, stated “No person may hunt, fish, pursue, trap, catch, injure or kill any bird, fish or animal on the airport except when specifically authorized by the Airport Manager.” This set the groundwork that airports were not a “multiple-use” site and that neither recreation nor conservation were considered part of a safe air system. To further assert the new(er) understanding that animals and aircraft don’t mix, the FAA insisted these airfields be equine-free, and said “No horseback riding on airports would be allowed.” This was an obvious improvement for safety at the expense of saddle patrols.

In 1973, 14 CFR Part 139.67, Bird Hazard Reduction, specified “the applicant for an airport operating certificate must show that it has established instructions and procedures for the prevention or removal of factors on the airport that attract, or may attract, birds.” This short guidance on Bird Hazard Reduction was eventually replaced in 1988 with the more detailed guidance we know today as FAR Part 139.337, Wildlife Hazard Management. The focus of this most recent regulatory chapter is the certificate holder’s responsibility to “take immediate action to alleviate wildlife hazards whenever they are detected”, followed by the requirements and components of associated with Wildlife Hazard Assessments (WHAs) and Wildlife Hazard Management Plans (WHMPs). Short of mandating WHAs, Part 139.337 defines four “triggering events” that would identify the need to conduct or revise a WHA or WHMP. Either activity could be triggered as a reaction to an air carrier aircraft experiencing engine ingestion, substantial damage from a wildlife strike, or multiple strikes within a single incident. The fourth triggering event defines the only proactive risk-based mandate, relying on the presence of wildlife within an airport’s flight pattern or movement area that is of a size or with population characteristics that could cause one of the three previously identified triggering events. Although there have been minor changes since 1988, the regulations and guidance have proven effective.

Nonregulatory guidance in the form of Advisory Circulars has continued to progress throughout the last five decades. AC 150/5200-32, Reporting Wildlife Aircraft Strikes, has seen several iterations; previously known as Announcement of Availability-Bird Strike Incident/Ingestion Report (1990), which in turn was a revision of the 1980 FAA Form 5200-7, Bird Strike Incident/Ingestion Report. AC 150/5200-33, Hazardous Wildlife Attractants On or Near Airports, first saw publication of its current form in 1997. AC 150/5200-34, Construction or Establishment of Landfills near Public Airports, was first published in 2000, while AC 150/5200-36, Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports, was released in 2006.
Effective mitigation of wildlife threats to aviation requires cooperative efforts between the aviation industry and Federal, state and local regulatory agencies. A noteworthy example of inter-agency collaboration occurred on April 5, 2000, when Congress enacted the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (Ford Act), Public Law 106–181. Section 503 of the Ford Act includes a provision limiting the construction or establishment of municipal solid waste landfills (MSWLFs) within six miles of certain smaller public airports. The FAA issued guidance regarding the requirements of the Ford Act in FAA AC 150/5200-34, Construction or Establishment of Landfills near Public Airports, on August 26, 2000. Effective October 9, 2002, the EPA incorporated the statutory requirement into 40 CFR Part 258, Criteria for Municipal Solid Waste Landfills.

Although common sense may be reliable in some cases, it is necessary that our laws, regulations, policies and Best Management Practices (BMPs) provide consistent, definitive guidance on safety. This guidance is based on the best scientific data, historic precedence, trends and public opinion, and it is modified and improved due to changes in the very same criteria. Change is inevitable, and improvements should be expected, especially as we move towards a more “risk-based” and proactive Safety Management System and expand the deterrence of wildlife risks well beyond an airport’s domain. Put another way, the road (or runway) to safety may change, but the horizon will remain the same.

Sycamore Ridge Landfill near Terre Haute, Indiana. Section 503 of the Ford Act limits the construction or establishment of MSWLFs within 6 miles of certain smaller public airports.

Source: Sustain.indiana.edu

LATEST FROM THE LAB ... NAME THE CULPRITS!

Marcy Heacker, Feather Identification Lab

Test your feather ID skills! The Smithsonian Feather Identification Laboratory identifies birds involved in wildlife strikes by analysing their remains using a variety of analytical techniques. Can you name the birds that these feathers come from? Answers are provided on page 11.
BASH: LESSONS LEARNED OR LESSONS LOST?

Lt. Col. M. Boyko and Ted Wilkens
USAF BASH Team, Air Force Safety Center

KIRTLAND AIR FORCE BASE, N.M. -- The eve of Fall 2015 marked a somber anniversary: the 20th year after the September 22, 1995, loss of Yukla 27, an Elmendorf E-3 Airborne Warning and Control System (AWACS) aircraft and all 24 souls on board. Although 20 years have passed, the poignancy of this crash still pierces hearts.

The lessons learned during the investigations of this tragic event led to great strides in Bird/Wildlife Aircraft Strike Hazard (BASH) reduction, to the extent that many call it the birth of modern-day BASH. Among the lessons drawn from the investigations, we'll address three: detection/communication, the ever-changing nature of wildlife risks, and complacency.

Detection/Communication
First, we need robust and timely detection and communication of wildlife hazards to aircrew and operations leadership. The C-130 that launched two minutes prior to the E-3 launch had flushed the geese from the ground, and the birds had flown away from the runway, not toward the departing aircraft. We need real-time threats communicated to aircrew. To figure out if this might be a lesson learned or a lesson lost at your location, ask this question: How often do you hear tower or other aircrew pass on observed or radioed bird positions to aircrews behind them? If this is something that occurs at your field, perhaps your aircrews are applying this lesson. If it does not happen at your field, you may want to take a look at whether your operators are aware of bird hazards. You might also want to provide information to your tower crews on what a bird can do to an airplane.

Wildlife risks are not static!
Second, we need to remember that wildlife risks are not static. Migration seasons and sunrise/sunset are known to increase the bird strike threat. Yukla 27 launched near sunrise during migration season, when Canada geese were known to inhabit the field. We now have educated flight crews on the “one hour before and one hour after” sunrise and sunset rule. We have trained flight safety personnel on risk identification and mitigation. To figure out if this might be a lesson learned or a lesson lost at your location, ask this question: Do my flight schedulers avoid these higher hazard times? If not, do your flight safety personnel and airfield managers actively mitigate the hazards to reduce the risk? If your answer is “no” to these questions, you may wish to review risk management truths with your crews. Then, train your flight safety personnel and airfield professionals on planning and executing a solid mitigation plan. There are numerous non-lethal and lethal options that can be considered.

Complacency
And lastly, there was a lack of respect or sense of urgency for the threat posed by Canada geese at the time of the Yukla 27 tragedy because many thought “we haven’t hit one yet”. Hundreds of Canada geese had been on base for weeks. If your aircrew and flight safety staff have forgotten about the impact of birds on aircraft or think we have eliminated the hazard, then I urge you to have a flight safety meeting and brief them on the January 8, 2013, Pave Hawk crash that took the lives of four Airmen.

Aviation professionals have a duty and mission to ensure that wildlife risks are recognized, understood and mitigated. This is true whether the threat is identified today or was identified 20 years ago. YOU will be key in ensuring that lessons are learned, not lost.
LONG-DISTANCE RECOVERY OF A BANDED BIRD: A “TAIL” OF TWO AIRPORTS

Richard A. Dolbeer, PhD, USDA

One unusual source for obtaining bird strike records for the FAA National Wildlife Strike Database (NWSD) is the Bird Banding Laboratory (BBL) of the U.S. Geologic Survey. When someone submits a band encounter to the BBL and indicates that the bird was hit by an aircraft, the “How obtained” code is assigned the number 39. I recently examined these Code 39 records from the BBL database and discovered one very weird band encounter: a red-tailed hawk (*Buteo jamaicensis*, band No. 194718512) was reported as struck by an aircraft at Honolulu International Airport (HNL) on April 17, 2013.

Why was this band recovery so weird?

First, the red-tailed hawk was originally banded and released near Ankeny National Wildlife Refuge, Oregon, on September 14, 2012. The hawk had been captured about 60 miles to the northeast at Portland International Airport (PDX) as part of a long-term capture/translocation program developed by the Port of Portland and Carole Hallett of Pacific Habitat Services, Inc. Second, Nick Atwell, Environmental Project Manager at PDX, reported to me that this translocated red-tailed hawk returned to PDX and was last seen in the area on April 9, 2013 – eight days before it was found 2,700 miles away at HNL. Third, red-tailed hawks are not found in the Hawaiian Islands! Hawaii has its own endemic buteo, the Hawaiian hawk (*Buteo solitarius*), which presently is restricted to the Big Island.

Piecing the Story Together….

After discussions with Carole, Nick and Jo Lutmerding of the BBL, we decided the most plausible explanation was that this bird was actually struck at PDX during take-off by one of the commercial aircraft that flies daily from PDX to HNL. The hawk was likely carried across the Pacific in the landing gear compartment and then dislodged from the landing gear and deposited on the runway at HNL upon aircraft touch down. Thus, we have entered this strike into the NWSD as occurring at PDX (not HNL) and made notes in the “Remarks” section to explain the circumstances. BBL has also revised this band encounter in its database.

Strange as it is, this is just another example of the due diligence that must be exercised to minimize the entry of erroneous and misleading records into the NWSD. The incident also demonstrates how invasive plant seeds, parasites, and other diseases could be conveyed by a bird and inadvertently introduced.

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1 “Not knowing how he lost himself, or how he recovered himself, he may never feel certain of not losing himself again.” — Charles Dickens, A Tale of Two Cities.

FAA ranks hawks 11th in its list of 25 species considered most hazardous to aircraft operations.

Source: USFWS.
RE-ESTABLISHING NATIVE VEGETATION

Herculean efforts to conserve our nation’s beautiful lands are ongoing across the continent. It is encouraging to see vegetation re-established and preserved for future generations. As new approaches are proposed and new ideas regarding airfield environments blossom, air safety professionals will require a ready mind to help build and sustain safe airfields. While listening to new concepts will be important, being prepared to present hazard mitigation truths, whether new or long standing, will be essential.

Some airports are being highlighted as locations where personnel are considering new environmentally friendly and economically responsible methods of airfield management. These methods may include the re-establishment of native vegetation to significant portions of airport properties. So let us consider a look a few aviation safety “elevator pitch” items:

- **Hazardous Wildlife.** A common goal for all airfield managers is to reduce the airfield’s attractiveness to hazardous wildlife. While large birds, such as geese, may not be attracted to tall native vegetation, they are not attracted to grass that is maintained at a height of 7 to 14 inches either, so re-establishing tall native vegetation in terms of safety may have no effect against large hazardous birds such as geese.

- **Erosion Control.** The re-establishment of native vegetation may be effective against controlling soil erosion; however, turf grass that is maintained at a height of 7 to 14 inches will also reduce soil erosion.

- **Security.** Airfield vegetation maintained at a height of 7 to 14 inches will also create a more secure airport, not only in terms of detecting hazardous wildlife, but also in terms of protecting aircraft and passengers from threats posed by those who wish us harm. It is impossible to remove or mitigate an airfield threat if it cannot be detected due to the presence of tall or excess vegetation.

**Other Considerations**

Airfields are artificially maintained environments designed for the safe launch and recovery of aircraft. Maintaining tall vegetation on an airfield will provide cover for large animals. If an unseen deer steps out of the higher vegetation and is struck by a rolling aircraft, it might not only be disastrous to the aircraft and passengers. Such mishaps can also lead to the spill of aircraft materials and fluids, as was the case in 2012 when a Cessna Citation 550 hit a deer on the runway in South Carolina, or cause fuel to burn incompletely and release pollutants into the atmosphere, such as in the 2007 F-16 crash at Luke AFB, Arizona (non-deer related). These events create ecological damage, expensive environmental cleanup efforts, and considerable time for the detoxification of the recovered soil. The effects of a post-crash fire would compound damage and cleanup efforts. A 2008 incident involving an F-16C cost taxpayers $150,000 in environmental cleanup. Imagine the cleanup cost for larger aircraft that carry significantly more fuel and composite materials. In addition to the impact of an aircraft mishap, let us consider the costs of aircraft damage. The average price of a used 737 is in the tens of millions of dollars. If we lose an old 737 at $20 million to a wildlife strike, the cost would be similar to spending $80,000 per month on airfield maintenance for 20 years, but we still wouldn’t reach the
RE-ESTABLISHING NATIVE VEGETATION (CONTINUED)

cost of the aircraft. If we further consider the environmental cleanup costs associated with the same mishap, the
difference in cost between the mishap and cost of maintaining a safer airfield environment increase further. And
how much is each life worth that is lost in a mishap?

The goal of re-establishing native flora on an airfield should only be pursued if it does not increase risk to flight
safety. Airfield managers must keep in mind that a vegetation type that deters one species may attract other hazardous
species by offering required resources such as food and cover. There is no argument that society must focus
on becoming more environmentally friendly; however, we must not compromise the safety of people or wildlife in
doing so.

There are many other items to consider, but these few may keep us all moving in the right direction of enhancing
safety for the flying public, those who live near airports, and even the environment around them. Safe flying to you
all from the U.S. Air Force BASH Team.

The Good, the Bad and the Ugly: Lessons Learned on Pyrotechnic Use

John Ostrom, Airside Operations Manager, Minneapolis-St. Paul International Airport

An accident occurred recently at a Great Lakes Region airport that involved an airport employee who was hazing
wildlife using pyrotechnics. The following is a synopsis of the accident:

The Air Traffic Control Tower reported to the airport that there was a coyote on the airfield. Two airport employees
responded with pyrotechnics to haze the coyote. The employees spotted the animal as it ran into a culvert under a
taxiway and proceeded to chase it out. One of the airport employees shot a 15mm pyrotechnic banger at the coyote
hiding in the culvert. The banger ricocheted off the concrete culvert and exploded, striking the employee in the arm,
neck, chest and leg. The employee was transported to the hospital and was diagnosed with cuts and first degree
burns on multiple parts of his body and bleeding from one ear. The employee was expected to make a full recovery.

During the course of the accident investigation, it was determined that both airport employees had received initial
training on the use of pyrotechnics four years earlier, but they had not received any recurrent training since the initial
training. The Bureau of Alcohol, Tobacco and Firearms (ATF) classifies bangers as Explosive Pest Control Devices (EPCD),
and ATF regulates their use because they contain flash powder and are considered high explosives. As outlined in FAA
Advisory Circular 150/5200-36A, Appendix D.1.f., any airport personnel using pyrotechnics launchers should receive
initial and recurrent training from a qualified individual in the following areas:

1. Safety, parts, and operation of pyrotechnic launchers.
2. Fundamentals of using pyrotechnics to safely and effectively disperse wildlife.
3. Personnel protective equipment.
4. Live fire training with pyrotechnic launchers including strategies for dispersing wildlife
   away from runways and aircraft movement corridors.
5. Applicable local, State, and Federal regulations on firearms, pyrotechnic launchers, and
   pyrotechnics.

EPCDs can be dangerous if not used properly, and they should never be fired at the
ground. To ensure employee safety, all individuals using EPCDs should wear
appropriate personal protective equipment, such as hearing and eye protection,
and follow all manufacturer guidelines.
STRIKE REPORTING EXCELLENCE AWARD
John Weller, Federal Aviation Administration

The Sandy Wright/Richard Dolbeer Excellence in Strike Reporting Award was established in 2014 to honor the incomparable dedication of Dr. Richard Dolbeer and Sandy Wright. Both have been exceptional in their management of the National Wildlife Strike Database since 1995, when FAA asked USDA to oversee the collection, quality control, analysis and summation of strike reports. The Sandy Wright/Richard Dolbeer Excellence in Strike Reporting Award will continue to recognize one certificated and one General Aviation (GA) airport annually that has developed a noteworthy strike reporting program.

The number of U.S. airports with strikes reported increased from 331 in 1990 to a record 673 in 2014. The 673 airports with strikes reported in 2014 included 396 certificated airports and 277 GA aviation airports. From 1990 to 2014, wildlife strikes have been reported from 1,871 U.S. airports. The criteria for identifying eligible airports are objective, including both the quantity and quality of strike data. (An airport will not be considered for the award based solely on number of strikes reported.) Criteria considered when identifying potential winners include, but are not limited to the following:

1. Number of reports filed
2. Completeness of reports
3. Percentage of reports identified to species
4. Percentage of reports filed online
5. Timeliness of reports submission
6. Collection of remains when available or necessary
7. Consistency in filing reports

Further evaluation are applied to identify airport finalists, such as:

1. Modification of reports filed online when new information is discovered
2. Follow-up with airline or engine manufacturer to obtain missing information for the strike record
3. Whether an airport has identified someone on a “Notification List” to receive notice when strikes are filed for their airport

Identifying each airport finalist was difficult! Congratulations to our winners, La Guardia International and Van Nuys airports, and to the contenders that provided a close match!

<table>
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<tr>
<th>2015 AIRPORT FINALISTS</th>
<th>SANDY WRIGHT/RICHARD DOLBEER EXCELLENCE IN STRIKE REPORTING AWARD</th>
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<tr>
<td>CERTIFICATED AIRPORTS</td>
<td>GENERAL AVIATION AIRPORTS</td>
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<td>Dallas-Fort Worth (DFW)</td>
<td>Cecil Airport (VQQ)</td>
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<tr>
<td>John F. Kennedy International (JFK)</td>
<td>Centennial (APA)</td>
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<td><strong>La Guardia (LGA)</strong></td>
<td>Morristown Municipal (MMU)</td>
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<td>Los Angeles International (LAX)</td>
<td>Van Nuys (VNY)</td>
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<tr>
<td>Salt Lake City (SLC)</td>
<td>Waukesha County (UES)</td>
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<td><strong>Honorable Mention</strong></td>
<td><strong>Honorable Mention</strong></td>
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<tr>
<td>■ Kansas City International (MCI)</td>
<td>■ Fort Lauderdale Executive Airport (FXE)</td>
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<td>■ Jacksonville Executive (CRG)</td>
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The bar has been set high and these airports, as well as each of the finalists, well deserve the recognition. Congratulations.
The need for pesticide application on airfields and agricultural land is well recognized. Airfield operators often need to control the prey base to manage raptors and to provide a safe airfield environment, and farmers need to protect their crops from animal depredation. A widely used pesticide, zinc phosphide, also referred to as ZP, has been a registered pesticide product in the United States since 1947. However, it is a restricted-use pesticide because of the hazards it can pose to non-target species. More than 80 registered products in the U.S. contain zinc phosphide.

Zinc phosphide is an inorganic compound that combines phosphorus with zinc. The compound is made into bait by adding it to oats/grains to attract small mammals. The bait causes a chemical reaction when it is exposed to moisture in the stomach. When an animal eats the bait, the acid in the stomach turns the zinc phosphide into a very toxic phosphine gas. The gas in the stomach crosses into the body’s cells and stops the production of energy (disrupting mitochondrial respiration) and causes the cells to die.

The risk of secondary poisoning associated with zinc phosphide is relatively low compared to other pesticide formulations, because it breaks down rapidly in the bodies of the animals that have directly ingested the bait. However, there is a risk to non-target species from direct ingestion, and caution should be taken.

To prevent risks to non-target species at your airport, develop and implement Best Management Practices (BMPs) to remain in compliance with the Endangered Species Act and the Migratory Bird Treaty Act. Such BMPs may include: application method, application timing to avoid exposure to the presence of sensitive species, hazing during and after applications, and, if possible, avoiding application over bare ground to reduce potential exposure to birds. While this list of BMPs is short, every airport is different and airports should design the application to meet its needs, while paying special attention to prevent adverse effects to non-target species.

For more information on zinc phosphide and other pesticides visit the National Pesticide Information Center: [http://npic.orst.edu/ingred/zp.html](http://npic.orst.edu/ingred/zp.html)
2015 Conference Roundup
If you were unable to attend Bird Strike North America’s fabulous, fun and informative conference in Montreal last September, you can still benefit from the knowledge shared. Conference proceedings from the 2015 conference are available from the Bird Strike Committee website at: http://www.birdstrike.org/conference/bird-strike-committee-proceedings/. The website includes conference proceedings dating back to 1999 and provides a wealth of knowledge.

As usual, the many poster and presentation submissions were creative and eye-catching. Congratulations to our winners.

Photo Contest 2015 - 1st Place
Winner: Kai Schafer

Poster Contest 2015 - 1st Place
Winner: John Ostrom

Latest from the Lab Answers
1. Short-eared owl
2. Peregrine falcon