



Wildlife at Fairbanks International Airport

Managing wildlife on airfields can be a complicated process, as there are many goals in mind. We want to reduce the risk of damaging strikes to protect people's health and safety. We also want to ensure that aircraft are not damaged. In the United States alone, the estimated annual loss to wildlife strikes is around 461 million dollars and 62,761 hours of aircraft downtime! Here at Fairbanks International Airport (FAI) we implement a wide number of techniques and tools to reduce the risk of wildlife strikes. This is done through habitat management, exclusion, hazing, and much more. Wildlife is ever adapting, and there is no such thing as a simple solution for managing wildlife on the airfield. That is why it is important we utilize all the tools at our disposal, develop and test new techniques to be more adaptable, and use science to drive decision making.

When it comes to assessing risk to aircraft, we can refer to past experiences within the industry to determine where our effort should be placed. For us in the interior of Alaska, waterfowl, gulls, and raptors tend to be the biggest risk. A lot of our management at Fairbanks international focuses on waterfowl. During spring migration alone there has been up to 6,000 ducks, geese, and swans stopping on the airfield. These species have a high potential for causing damage to aircraft. On September 22, 1995 at Joint Base Elmendorf-Richardson, a group of geese was ingested into the engines of an AWACS, causing it to crash with 24 souls on board. Today there are new requirements for airfields, dedicated staff, and more tools available to reduce risk of this occurring again. Another species that we have at Fairbanks from time to time is bald eagles. These majestic birds are less common in the interior compared to our neighbors in Southeastern Alaska or Southcentral Alaska but still pose a major risk to aircraft.

Bald eagles are ranked #10 on the Federal Aviation Administration's (FAA) list of the top 79 most hazardous wildlife species to aviation (DeVault et al 2018). This list is derived from the FAA Wildlife Strike Database, which has been documenting wildlife strikes and their impacts across the country since 1990. The database shows that there have been 542 recorded strikes with bald eagles in the United States in the last 30 years, resulting in \$39,706,760 in aircraft damage, 10 injuries, and 4 human casualties. A high proportion of these strikes (about 1/5) have occurred in Alaska. All 4 fatalities were the result of a 2016 mid-air collision between a bald eagle and Cessna 172 performing aerial surveys near Birchwood, a small community just 20 miles from Anchorage.

Here at FAI we recently encountered a bald eagle that was injured, unrelated to any aircraft. On the evening of Saturday January 11th, Fairbanks Police and Fire received a call from concerned citizens regarding a bald eagle that was not flying. In response, Fairbanks International Airport police and fire were able to safely capture it. After its capture, the Wildlife Services airport biologist was able to provide temporary quarters for the eagle. On the morning of January 12th Alaska Department of Fish and Game was able to come in and assess the eagle's health. The working hypothesis is that the eagle got into deep snow preventing it from preening itself, and building up too much ice on its breast feathers, therefore preventing it from flying.





After a clean bill of health was given, the US Fish and Wildlife Service granted approval to relocate the eagle off airport property to a safe location. Due to the unique circumstances, we were able to successfully reduce the risk to aircraft and help the individual along. Unfortunately eagles stories at airports don't always end well.

Most recently, a Horizon Air EMB-170 operated by Alaska Airlines struck a juvenile bald eagle on Christmas Eve, 2024 upon departure from ANC. Unable to determine the severity of the damage while in the air, the pilot made the decision to return the plane full of 75 passengers to the airport for a precautionary landing. Fortunately, the landing gear door was the only part of the plane damaged, and no humans were injured. The eagle survived the initial strike but had to be euthanized due to the extremely traumatic nature of its injuries. If this bird had been flying just a few feet higher, this story could have had an even more tragic ending.

These are only a handful of examples of bird strikes within the state of Alaska. It is also why every major airport in the state runs a rigorous wildlife management program to reduce the risk to humans, aircraft, and the wildlife.

