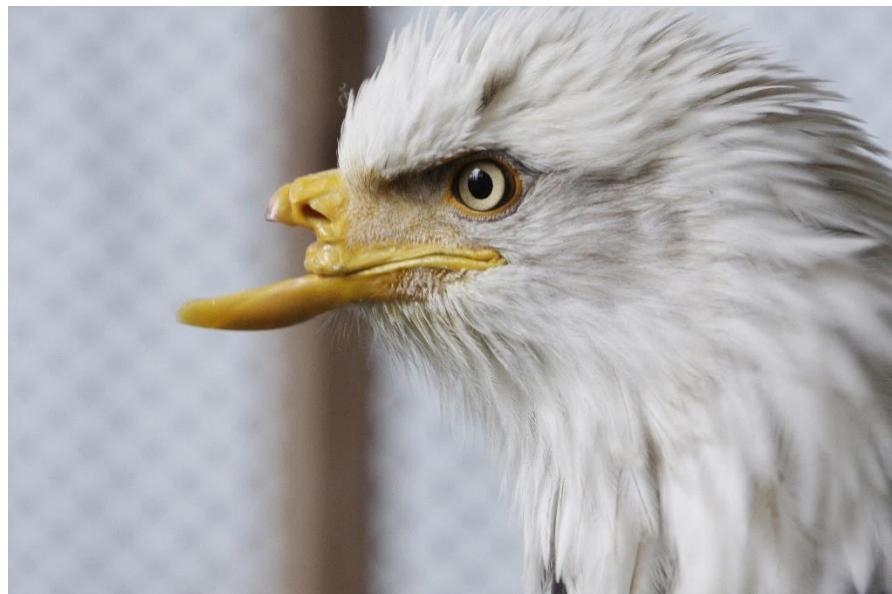


## Beauty and The Beak :

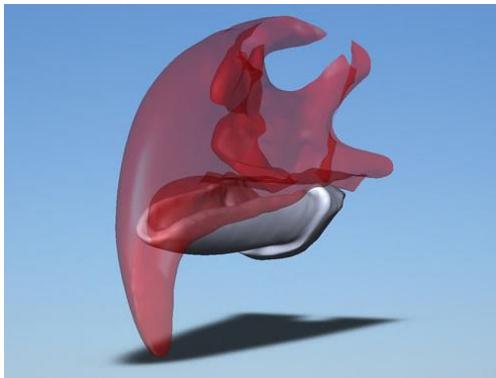
Even animals sometimes need the help of engineers!

Beauty the bald eagle was found in Alaska in 2005, trying to scavenge for food at a landfill. Eagles do not normally look to human trash for food, but Beauty's circumstances weren't normal. Her beak had been shattered by a poacher, and the injury made it impossible for the bird to eat its normal food. Bald eagles are predators, and trying to capture and eat prey with a broken beak is like trying to use a fork to eat soup.



Eagles don't just eat with their beaks though. Birds rely on their beaks to help them preen themselves (clean and comb their feathers), and collect nest-building materials. Without a working beak, it would be very hard for an eagle to survive in the wild.

After Beauty was discovered, she was taken to a rehabilitation center in Idaho, and nursed back to health by dedicated volunteers. A team of scientists, medical specialists, and engineers came together to create a prosthetic beak for the injured eagle.



A dentist helped to attach the new prosthetic beak to what remained of Beauty's damaged beak. Soon after the procedure was complete, Beauty was back to preening and feeding herself just as she would have before the injury.

Beauty still cannot be released back into the wild. As she continues to grow, adjustments will need to be made to her prosthetic beak to ensure that she remains happy and healthy.

In this activity, you'll test your engineering skills and see if you could design a beak for Beauty to use!

(Adapted from the Museum of Science Engineering Notebook and The Guardian, *Restoring Beauty*)