



### Efficient Winged-Hunter

One of God's magnificent creatures, the owl continues to amaze both scientists and every-day people alike. This group of predatory birds has several different subsections, which are found on six of the seven continents that make up earth. This amazing creature is equipped with everything that makes a good hunter. Its talons can be so sharp that they can puncture skin on contact. Their beaks have amazing crushing power. And their eyesight is so keen they can fly on the darkest night without wrecking into anything. Also, their hearing is amazingly sensitive, and the strange feathers on their "face" have a funneling effect which helps amplify sound.



However, it is the feathers of owls that have become of particular interest to scientists of late. On the outer edge of owls' wings are little 'winglets' made up of a few feathers. These winglets, along with the owl's other hunting apparatus, are essential to the success of a hunt. When the owl is coming in for the kill it is key that the prey remain unaware of danger. The winglets and the fringed back edge of the owl's wings help with noise reduction so much that the owl is virtually noiseless in flight. Of all the owl's feathers, though, the outer 'winglets' are the ones that have recently been copied by human aeronautical engineers. The angle at which the owl's winglets are placed in reference to the rest of its wing is such that drag is dramatically reduced, and thus the owl uses less energy while flying. This intriguing discovery by scientists led to the development of the modern jet air-craft winglet, which the

casual observer will find on the ends of the main wings of jet-liners. The below graph shows the drag-reducing affect of the winglets.



The ingenious design of the owl's winglet is just one more example of God's thoughtfulness in His handiwork of creation, which mankind has simply copied to use for our own benefit.