

Whirlybirds

By Dennis Payton Knight

The helicopter is an amazing flying machine, rising straight into the air, flitting fore and aft, up, down and backwards, and settling back to earth like a sparrow, if a bit noisier. It was foreseen in China two millennia ago. In the 1480's Leonardo da Vinci dreamt up his aerial screw, an elegant idea, but dysfunctional because of weight and reliance on human power to supply the rotation.

For centuries, inventors in many nations played around with similar ideas until Igor Sikorsky, an engineer from Kiev who came to the United States after the Bolshevik Revolution, founded his aviation company on a chicken farm on Long Island. He designed the world's first practical helicopter, and it lifted off in 1939.

But with due credit to da Vinci and Sikorsky, humans have never invented anything that can duplicate the marvels of two of mother nature's most efficient whirlybirds, the hummingbird and the dragonfly, nor anything that can match their beauty.

Among the smallest of birds, the hummingbird is, in its own tiny way, among the noisiest. It is named for the sound, audible to humans, created by wings that beat up to 12 times per second in the largest species, and in excess of 80 times in the smallest, in a pattern that mimics the traditional symbol of eternity. It forages on the nectars of flowers, for which it seems to hover in the air, darting in and out, fluttering vertically and horizontally from blossom to blossom, sampling delights. Its metabolism seems unmatched in nature, and yet, when food is scarce, or at night when not foraging, it goes into torpor, its metabolic rate slowing to one-fifteenth of its normal.

The hummingbird co-evolved with, and to the mutual benefit of the flowers upon which it feeds. The plants that attract it the most have blossoms of reds, oranges and bright pinks, but it will take nectar from flowers of other colors, too.

The dragonfly is a powerful and agile flier, capable of migrating across the sea. It, too, can propel itself up, down, left, right, forward, and backward. It can hover and make hairpin turns. One dragonfly will capture in the air and devour a hundred or more mosquitos every day. For that reason alone, of all the insects, the dragonfly is one of the most beneficial to humans.

Whirlybirds are colorful. Nature gives the hummingbird iridescent feathers in striking reds, purples, oranges, blues and pinks. Dragonflies, too, are brilliantly iridescent, coming in greens, blues, pinks and the many shades in between. If a helicopter is beautiful, it's because of a nice paint job.

Whirlybirds are symbolic. Around the world, the dragonfly symbolizes transformation, self-realization, and the deeper meanings of life. The hummingbird, native only to the Americas, is seen as a healer and bringer of love, peace and happiness. The helicopter symbolizes the inventiveness of mankind, in war and in peace, taking lives, transporting lives, and saving lives.

So, let's hear it for the whirlybirds.