



COMPANION PARROTS AND FLIGHT

Part One: Parrots, Flight, and Humans

The conversation about companion parrots and flight has been ongoing for over two decades now, the hallmarks of which have been radical bias and lack of information. In short, the discussion has been acutely dysfunctional and has done little to move forward in any significant way quality of life for *the majority of parrots*. Choices about whether to allow a companion parrot to fly in the home are still most often based upon opinion and/or fear.



While I see evidence these days of greater open-mindedness towards the allowance of flight for parrots in the home, a wide-spread lack of information and understanding about flight persists and must be corrected. We must all set aside personal biases, with the recognition of two dichotomous facts: (1) flight is a parrot's birthright, and (2) flight is not possible for all companion parrots in all homes.

Between these two extremes, there is much to discover and discuss. Flight is such a complex system of behaviors, both physical and mental, that I might spend two years writing about it before I felt that the subject had been sufficiently covered. That's not practical of course, but

I will need to divide this topic into a number of posts. This one will serve as an introduction to the discussion.

I do not believe that we can, nor should, attempt to discuss flight for our own parrots until we obtain some perspective about the real nature of flight for birds.

Birds and Flight

Birds are currently the only living creatures with feathers and most species have evolved to use those feathers as their primary means of getting from place to place. Given that fact, even those readers without familiarity with parrots might assume that feathers and flight would be of critical, primary importance to the life experience of any bird.



In *The Lives of Birds*, Lester L. Short remarks, "...everything about a bird's physical structure, and indeed much of its physiology, is affected to some degree by the constraints of flight." We could take Mr. Short's observations one step further to rightly state that *everything* about a bird is affected by its need and ability to fly, including its emotional make-up. A bird *is* flight, and to ignore this in our parrot keeping practices is to do them an injustice.

Feathers and Function

Feathers come in several different forms. Smooth ones cover the body, fluffy ones provide warmth and insulation, and long, stiff feathers provide support for flight. An average-sized bird has several thousand feathers, which grow in feather tracts, with patches of bare skin in between. The flight feathers have a central, spongy shaft, making the feather lighter and more flexible for flight.



Barbs extend outward, slanting diagonally from either side of the feather shaft. You can easily pull these barbs apart, then by pressing above and below the separation, zip them together again, the same way the bird does while preening. From each side of the barb grow hundreds of barbules that overlap each other. Minute hooks on the barbules lock the branches together. The “construction” of even a single feather is exquisitely complex.

Feathers have many advantages. They are light and are replaced regularly when worn or lost. Each feather is individually attached to a muscle, which allows for greater maneuverability. (Poole, R. 1983) Feathers enable birds to fly thousands of miles a year, to fly at speeds of 100 miles an hour, to hover and fly backwards, and to fly for days at a stretch without stopping.

Other Accommodations

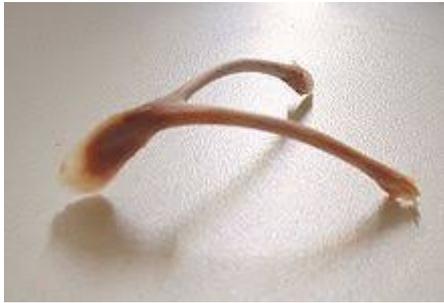
The bird’s skeleton has evolved in such a way as to keep flying weight to a minimum. The skull of most birds is paper thin. Many have hollow bones, which are filled with air sacs for increased buoyancy. A frigate bird, whose wing span is seven feet wide, has a skeleton that weighs only four ounces, less than the weight of its feathers. (Poole, R. 1983)



Internal organs have evolved in such a way as to make flight easier as well. The heart has become enlarged to include four chambers in most birds, in order to be able to remove impurities from the blood more quickly.

In the respiratory system, air is pumped through a system of air sacs that branch off the lungs to occupy much of the bird’s body. In some species, this system of air sacs extends even

down into the legs. In fact, in 1758, an English surgeon showed that a bird could still breathe if you completely blocked his windpipe, but made a small hole from the outside into a wing or leg bone. (Page, J. 1989)



The fusion of various bones in the skeleton has also resulted in decreased overall weight, and in some cases more flexibility. The bones of the clavicles have fused into the “wishbone” or furcula. Scientists have been able to view, with high-speed x-ray movies, the flight of a starling in a wind tunnel. They observed that the furcula opens and closes with each wing beat, acting as a sort of spring or bellows. This appears to assist the bird in breathing, pumping air throughout the respiratory system. (Page, J. 1989)

Flight and Migration

One of the most important functions of flight is that of migration.



Even tropical birds, who are not subjected to the extremes of weather, move with the seasonal rains and droughts, often across hundreds of miles. Certain examples of migratory flight almost defy belief. Some shorebirds fly non-stop from South America to the coast of New Jersey. This flight takes ten days to complete, a total of 240 hours of *uninterrupted* flight. The motivating force behind migration is about finding food, rather than avoiding severe temperatures. In reporting the migratory efforts of the short-tailed shearwater, a bird that covers over 18,000 miles in a single year, Weidensaul comments, “Migrations like this leave us staggered; we are such stodgy, rooted creatures. To think of crossing thousands of miles under our own power is as incomprehensible as jumping to the moon. Yet even the tiniest of birds perform such miracles.”

Flight Skills

During flight, a number of flight skills are demonstrated. The bird must be able to gain lift. Three factors affect lift: the surface area of the wing, the wind speed, and the angle at which the wing is held.



Gliding is another important skill for a flying bird. A bird will stop beating its wings, and thus begin to glide. This results in a loss of speed, which enables the bird to land. Gliding and hovering are necessary to landing. Powered flight requires more energy, and is achieved when the pectoral muscles drive the wing downwards. Birds must also be able to steer themselves once in the air. They can do this solely through the use of the wings. This is achieved by altering the angle or shape of one wing.

Flight and Humans

Aside from the importance it has to birds, flight has carried significance for humans since time began. As Jack Page and Eugene Morton write in *Lords of the Air*, “We humans appear always to have been on the lookout for ways to understand ourselves and our world, and for most of our tenure here, we have rarely looked at any bird – say, a crow – and simply seen a crow.... In the first place, crows and most other birds fly, and flight has meaning.



The crow is black, and black means something. Feathers mean something, as do the eggs from which the crow is born. For most people throughout time, these meanings have been as real as the bird itself, and perhaps more so, since the meanings were taken to be universal and eternal. Flight means space, light, thought, imagination.”

Among the early Egyptians, Greeks and Romans, the bird came to signify the human soul. In ancient Egypt, the feather was one of the hieroglyphic elements that spelled such words as lightness and height. Wings have been seen as analogous to spirituality. To the Greeks, they also signified love and victory.

While these are only a few of the fascinating facts related to bird flight, they underscore two major points. First, every physical feature of the bird has evolved to facilitate flight. Second, much of our fascination with birds is because they *can* fly.

A Subjective View of Feathers and Flight

I bred African Grey parrots for many years, back at a time when wing clipping was done by rote. Thanks to mentor Phoebe Linden, however, I understood the importance of the fledging experience. In the earliest years, babies enjoyed flight for two weeks before gradual wing clipping.

As I observed the astonishing gains to them from this experience, I made sure that they flew for three to four weeks before their clip. I was witness at this point to how young parrots use flight to reach important developmental milestones. After fledging, they first work on developing flight skills – landing safely, calculating the power of flight necessary to cover a particular distance, hovering, and more.



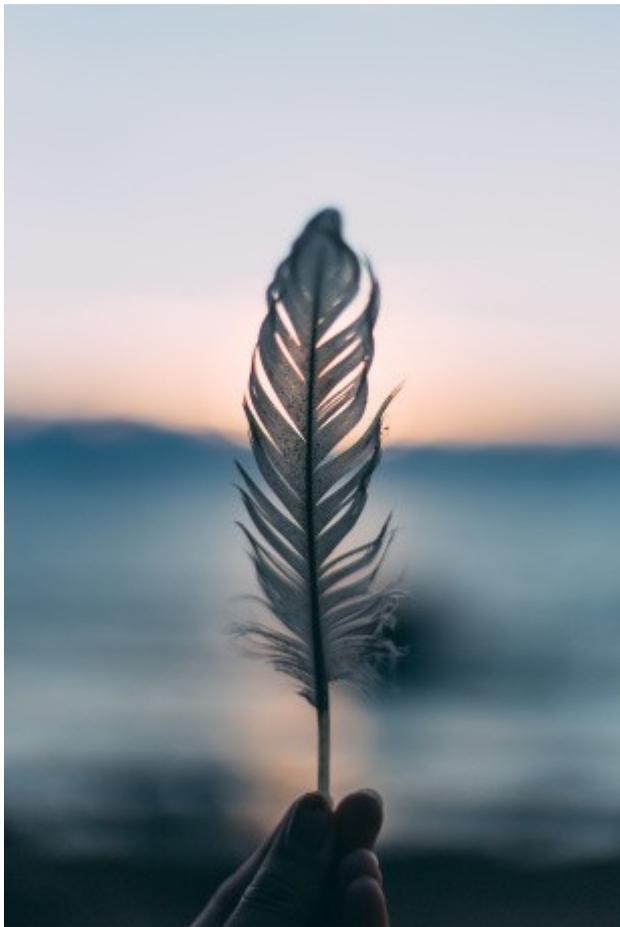
Once able to fly with skill, they then began to use this newfound ability to explore their environment. Finally, in their fifth and sixth week of flight, they turned their attention to the use of flight to communicate with each other and to build social relationships with each other and with me.

At this point, I made a discovery that completely changed my breeding practices and thinking about the importance of flight to a companion parrot. When I performed a slight wing clip on babies who had flown for a period of six weeks, I saw that this had a devastating impact on them. Flight had truly become *who* they were, and I had taken that away from them.

I had perpetrated a crime in my own ignorance and because, like so many, I had accepted without question the oft-repeated advice that companion parrots should have their wings clipped. Never again. From that point on, I quit clipping babies entirely, sending them to new homes fully flighted and trained to recall on cue.

We Destroy What We Value

Documentation of much of our own human behavior over millennia reveals how much we value birds and their ability to fly. Yet, we have been emotionally comfortable removing this remarkable ability from those in our care.



How do we reconcile this? Frankly, I don't know. While the ability to fly has enchanted us on one level, we have been quick to prevent it on another.

Perhaps it's our unquestioned conviction that we always know what's best for animals in our care. Perhaps it stems from a need to have an experience with birds in our homes that is predictable and controlled. Perhaps it has been a too-easy acceptance of what others have pronounced to be true.

Myths about Flight in the Home

How often have you heard that we must clip our parrots' wings to keep them safe? To protect them from flying into windows or onto the hot stove? To keep them from drowning in toilets? Some veterinarians still espouse this advice by rote.

In truth, parrots are learners. If they can learn to keep themselves safe in the wild, they can (and do) learn to keep themselves safe in our homes. True, accidents can happen. However, accidents happen all the time to parrots who can't fly as well. That is *our* purview – to anticipate possible problems and make changes to the environment to prevent them, no matter the state of flight feathers.

The real question is this: Can companion parrots enjoy complete physical, mental and emotional health without flight? And, if the answer is “no,” then where do we go from here? How do we learn to live successfully with a parrot who flies?

Future episodes of the blog will explore the benefits of flight to companion parrots, how to determine whether your bird is candidate for flight, how to set up the home for flighted bird, and how to live successfully and safely with flighted parrots.

Thank you for reading my blog. I am Pamela Clark, an IAABC Certified Parrot Behavior Consultant and veterinary technician. My passion is helping people with parrots. To access free resources or subscribe to my newsletter (which is a different publication from this blog), please visit me at <http://www.pamelaclarkonline.com>. Until next time!

Resources

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