



# Roundtable

... with Louis C. Fink

## About Superbird

With interest I read the account of the giant teratorn from South America (Fall 1982 issue of *Chat*) that was alleged to have had a wingspan of 250 feet and to have weighed approximately 160 pounds. Such a bird would have a span about twice the height of a tall pine tree. I find such a report incredible and more than a little suspect.

Be that as it may, I took the time to estimate what the wingspan of a bird of around 160 pounds should be, based upon information at hand today, and came up with a figure much less than 250 feet.

A teratorn was a vulture; all huge flying birds that cruise the land today, and in the past, seem to be vultures. I don't know why. I took average wingspans and weights of various Old and New World vultures from Amadon and Brown's *Birds of Prey of the World* and from Brown, Urban, and Newman's *Birds of Africa*, as listed below.

	Weight in lbs. (X)	Wingspan in feet (Y)
<i>Aegyptius monachus</i>	21.5	8.6
<i>Aegyptius occipitalis</i>	10.6	6.9
<i>Aegyptius tracheliotus</i>	15.4	8.6
<i>Coragyps atratus</i>	3.5	4.5
<i>Gymnogyps californianus</i>	19.5	9.0
<i>Gyps africanus</i>	11.6	7.2
<i>Gyps fulvus</i>	19.5	7.7
<i>Gyps rueppellii</i>	17.4	7.9
<i>Necrosyrtes monachus</i>	4.0	5.7
<i>Vultur gryphus</i>	26.4	10.5

Assuming that the body weight was the independent variable (X) and wingspan the dependent variable (Y), regression of the latter on wingspan yielded a highly significant correlation of 0.943, which means that  $(0.943)^2$  or about 89% of the variation in wingspan of these vultures is a function of body weight.

The close relationship is remarkable in view of the fact that these birds are known to vary somewhat in wingloading, and the plot of body weight against wingspan is probably somewhat curvilinear and not precisely linear as I have assumed. Nevertheless, the fit was good enough to make some rather striking predictions.

The relationships between wingspan and body weight produced the following linear equation:  $Y = 4.43 + 0.216X$ , where X and Y are body weight and wingspan, 4.43 the point

on the Y axis where the best fitting regression line intercepts the Y axis, and 0.216 the tangent of the angle described by the slope of the regression line above the X axis.

A large teratorn from California has been estimated to have had a wingspan of 15 feet and to have weighed 50 pounds. Plugging 50 into the equation estimates wingspan at 15.2 feet. A vulture weighing 160 lbs. would have a predicted wingspan of 39.0 feet, far less than 250.

Of course we can flip our analysis around and allow wingspan to be the X variable. If we do that, we predict our California teratorn to have had a body weight of about 46 pounds and our South American monster at around 1000! That would indeed be a superbird. Perhaps the South American vulture evolved on a different scale of wingspan to body weight than modern vultures and the California teratorn.—JOSHUA A. LEE, 5104 Newcastle Road, Raleigh, N.C.

### **Berries for Bluebirds**

Jack R. Finch, Route 1, Box 341, Bailey, N.C. 27807, is interested in developing methods for preserving Flowering Dogwood berries so they can be fed to Eastern Bluebirds during late-winter snow and ice storms. He is experimenting with techniques that reduce the moisture content to prevent spoilage during storage. He would like to correspond with anyone who has experience with such processes.

### **Evolution in the House Finch**

According to John W. Aldrich (J. Yamashina Inst. Ornith. 14:179-186), the population of House Finches breeding in the eastern United States has developed some noticeable differences from its parent stock. The birds released on Long Island about 1940 are believed to have been from the grassland and chaparral region of southwestern California. Comparative studies indicate that the eastern population has developed slightly shorter wings and tails, markedly shorter tarsi and toes, and significantly larger bills than found in California birds. Dr. Aldrich suggests that the shorter wings and tails, if indicative of body size, may be correlated with the more moist climate in the East. Shorter legs and toes may be an adaptation to the colder climate in the East and to this largely feeder-dependent population's habit of feeding from perches rather than on the ground. The larger bill size may be an adaptation to feeding heavily on sunflower seeds rather than the small weed seeds that are the primary winter food of the California birds. Aldrich notes that when eastern House Finches have an opportunity to choose between large striped and small black sunflower seeds, they prefer the small ones. He also found that females visit his hanging feeders more often than males do. He believes this is a behavioral difference rather than a disproportion in the sex ratio of the eastern population.

### **Winter Scarcity**

Observers report a lack in some places of our winter finches. The editor of this column in Rocky Mount has a feeder that attracted two House Finches all winter, no siskins, no grosbeaks, no goldfinches. Even the juncos seem reduced in number. In Cleveland, Ohio, observers report House Finches are more abundant than usual, but other winter finches reduced in numbers. If you're ever in Cleveland in the fall, walk a few blocks from the downtown hotels to the lakefront park near the Cleveland Browns' stadium. I spent a morning there and delighted in close views of warblers, resting after the trip south over Lake

Erie. My mind is still full of pictures of dozens of Black-throated Blue Warblers I saw at arm's length.

### **Search for Color-marked Shorebirds**

In the spring of 1983, shorebirds were color-marked at several locations in South America, California, North Carolina, Virginia, and New Jersey as part of a study of migration routes. This study is part of the Pan American Shorebird Program sponsored in part by the World Wildlife Fund, the Academy of Natural Sciences of Philadelphia, and Manomet Bird Observatory. The 1983 work will focus on three species: Sanderling, Red Knot, and Black-bellied Plover.

If you observe a color-marked shorebird, please try to note the following:

1. DYE — Color and location on body
2. LEG FLAG — Color and leg (left, right)
3. LEG BAND — Color and leg (left, right)

Even incomplete color-marking information will be very useful. Please send reports to Dr. Marshall A. Howe, Patuxent Wildlife Research Center, U.S. Fish and Wildlife Service, Laurel, Maryland 20708.

### **Trouble in Paradise**

Suriname, the former Dutch colony in South America, has more nature preserves for its size than most countries. It is home to 669 tropical species and bird watchers have made it a mecca. A 3-week tour for \$2,300 was popular. But an Army sergeant has taken over the government of Suriname and the U.S. State Department now says the tropical country is too dangerous for ordinary travelers.

In reporting this sad news, the *Wall Street Journal* included results of a 1980 survey by the Fish and Wildlife Service: 21 million Americans feed birds; over five million can identify 40 species; 2½ million keep lists. With tongue in cheek, one observer raised the question of organizing an insurgency force to invade Suriname.

### **Newspaper Gleanings**

The most exciting news to this observer is the report of two eggs of California Condors being hatched, and the young feeding successfully on chopped day-old mice. These 8-foot, 25-pound birds normally lay one egg every two years. When an egg is removed from the nest, they lay another.

Glad-to-hear-it Department: Two men from New Bern, N.C., were fined \$1,500 each for hunting Canada Geese by moonlight.

Sorry-about-that Department: In Lumberton, N.C., woodpeckers drilled holes in light poles at the football field, and \$100,000 has been budgeted to replace the lighting system.

The swallows are back at Capistrano, and the buzzards have returned for their big day at Hinckley, Ohio, where the locals stage a big breakfast to greet the birds. The citizens of Rokeby Lock claim their buzzards return before the Hinckley birds, so they're having their own party.

At the battlefield of Gettysburg, at least 870 Black and Turkey Vultures wintered over the fields where 50,000 men were wounded or killed. The legend is that the birds began roosting in 1863 after the battle, and have returned ever since. One biologist says this is one of the largest vulture roosts in the country.