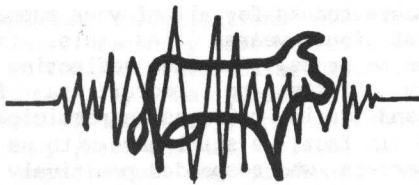


July 1982
(Final Issue)



EARTHQUAKE WATCH

NEWSLETTER

DISTRIBUTED MONTHLY TO MORE THAN 1500 VOLUNTEER ANIMAL OBSERVERS IN CALIFORNIA

LO, THE LOWLY ROCK DOVE

Buford Holt

The common pigeon, also known as a rock dove is easily recognizable by its awkward strutting but very graceful flying. Small and plump, the common types are drab colored and seem to be comfortable in cities, though most of the 290 known species (including doves) are very colorful and live in the tropics. They are monogamous -- one mate for life. Young birds are cared for in the nest for up to 18 days after hatching. For the first week they are fed by "pigeon milk", a nutritious secretion from the crops of both mother and father.

Close relatives of the common pigeon include the snow pigeon, which breeds at 15,000 feet in rock crevices on Mt. Everest; the wood pigeon, up to 16 inches long, the largest European species; the crowned pigeon of New Guinea, colored maroon and blue-grey and as large as a chicken; and, perhaps most famous, the North American passenger pigeon. This last named variety has been extinct since 1914, when the last survivor (named Martha) died in the Cincinnati Zoo. It used to number in the billions, but was an easy target for market hunters. It's demise is a classic example of the total destruction of an animal species by man.



ROCK DOVE

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The homing pigeon is a specialized variety developed through selective breeding for maximum distance and/or speed in directed flight. Its practical use for communicating messages can be traced back to 3000 B.C. in Egypt, and reappears in Baghdad (1100 B.C.), China (Genghis Kahn); France (during the French Revolution), and most recently in Europe during this century. The record distance for a homing pigeon was a 2300-mile flight by a bird of the U.S. Army Signal Corps.

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PROJECT EARTHQUAKE WATCH TO BE TERMINATED

THE END HAS COME ... OR HAS IT?

We sincerely hoped that this column would never have to be written -- at least not until we had completed our research and arrived at a scientifically supportable conclusion about the validity of the animal hypothesis. But, of course, it's understandable that funds cannot be allocated indefinitely for a project such as this, whose success depends so much on the whims of unpredictable Mother Nature. She has been somewhat kind to us in that several (13) earthquakes of moderate magnitude ($M \geq 4.0$) have occurred near or on the fringes of our network of observers. Of these, seven were preceded by enough hot line reports of unusual animal behavior that the results were statistically significant. Only one of these seven, however, was a truly impressive hit: the Fremont earthquake ($M=4.3$) of March 3, 1981, which was preceded by 21 hot line reports during the 30 day period before the earthquake. The number of reports expected for this region for that same 30-day period was less than one. The probability of this result being due to chance alone was one in 20,000 ($P < .00005$).

Although impressive, one hit doesn't prove the case in research of this type. There are many uncontrollable variables that may have been responsible for the significant increased rate of reporting. Our investigation tended to rule out the most obvious (e.g., unusual weather; social events, such as a county fair, animal shows, etc; local fires or other natural catastrophes; an influx of predators or an infestation), but one can never be sure all extraneous variables have been ruled out.

We needed at least one more good "hit", preferably in another region of California, to encourage the powers that be that more funding is justified. With two more, I feel certain we'd be in business today.

That didn't happen. With the tightening of federal funds, and the relative lack of concern in Congress for earthquake matters, other "more promising" programs beat us out. So, all we can say is: "We tried".

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