Egg weights were recorded for 23 eggs, all but 2 of them infertile. The 2 fertile eggs, produced in 1963, weighed 204.4 g and 199.7 g at 9 days and at 13 days prior to hatching respectively. The 21 infertile eggs for which weights were obtained near the start of incubation varied from 199.0 to 258.0 g with a distribution as follows: 199–210 g (2 eggs), 211–220 g (1), 221–230 g (2), 231–240 g (6), 241–250 g (4), 251–258 g (6).

Seven incubation periods have been recorded since 1963; 3 of 35 days, 2 of 36 days, 1 of 37 days, and 1 of 32 days.

We thank Joseph Bell, Donald Bruning, Eric Edler, and Andrew Winnegar for observations and comments.—WILLIAM CONWAY AND ALLEGRA HAMER, *New York Zoological Society, Bronx, New York 10460*. Accepted 19 Aug. 76.

An immature specimen of *Baptornis advenus* from the Cretaceous of Kansas.—In 1962 Bonner discovered a partial skeleton of the Cretaceous diving bird, *Baptornis advenus*, Kansas University Vertebrate Paleontology (KUVP) 16112, from the Smoky Hill (upper) member of the Niobrara Chalk. The specimen was in KUVP Logan County collecting locality 20, in the SE ¼, NW ¼, sec. 13, T 15 S, R 34 W, Logan County, Kansas. This is the same locality and horizon as the quarry that produced many slabs of the floating crinoid, *Uintacrinus socialis* (Miller et al. 1957). The skeleton of *Baptornis* was fragmentary and from a young individual. Parts of the premaxilla, cervical, thoracic, and sacral vertebrae, pelvis, both femora, both tibiotarsi, both tarsometatarsi and some phalanges were recovered. Immature specimens of Mesozoic birds occur infrequently, although the proximal end of a tarsometatarsus associated with the type of *B. advenus* is also from a very young individual.

The adult skelton of *Baptornis* has recently been described in detail by Martin and Tate (1976). In the present specimen, the fragment of premaxilla (Fig. 1, I) comes from a point just anterior to the external nares and indicates a bill similar to that of *Hesperornis*. If teeth were present, they were restricted to the maxillary as in *Hesperornis*. The cervical vertebrae include specimens that seem to correspond to the 8th, 13th, and 14th cervicals of *Hesperornis*, but appear to be shorter and more massive than in that genus. The ventral border of the centrum corresponding to the 8th cervical is flat and hourglass shaped. The vertebrae corresponding to the 13th and 14th cervicals have very short centra and long sublateral processes, which do not unite ventrally. Five vertebrae bearing rib facets are present. Two of these have narrow articulations of the centra and narrow hypapophyses. Another vertebra corresponds to the 22nd vertebra in *Hesperornis* and has small hypapophyses. The two following vertebrae are also preserved. That corresponding to the 24th in *Hesperornis* does not bear a rib. It has a short transverse process with a broad triangular area on its lateral margin for articulation with the ilium. A portion of the sacrum with three fused vertebrae is also present. Several of the dorsal vertebrae have small, shallow pits on the articular surface of the centrum although all are fully heterocoelous.

The right femur (Fig. 1, A) is represented by fragments of both the proximal and distal ends, while the left femur is represented by a portion of the proximal end including the head. The femur seems to have achieved most of the adult proportions (Fig. 1, B). The tibiotarsi are represented by the distal end and part of the shaft of the right (Fig. 1, C) and the distal end of the left. The tarsals were not fused either to the tibia or to the metatarsals and therefore were not recovered. The shaft of the tibiotarsus is very slender, flat and only about 72% as wide as that of an adult. This specimen was mistakenly identified as the proximal end of a large humerus by Walker (1967, p. 65). The three metatarsals are not fused in the proximal end of KUVP 16112, although the distal end was completely ossified. The metatarsals increase in size from the second to the fourth. The tarsometatarsus (Fig. 1, F) is at least 10% smaller than that of an adult (Fig. 1, G). Proximal ends of two phalanges and the distal end of another are present.

Descriptions of immature fossil birds are rare, although Howard (1945) published a very useful paper on the growth stages of the tarsometatarsi of the fossil turkey *Parapavo californicus*, from Rancho La Brea. She recognized nine stages of development from newly hatched chicks to fully grown birds. The present specimens of *Baptornis* would seem to fall into her "group IV" which she characterized as having the "distal end nearly completely formed except external foramen not entirely closed off. Proximal end still spongy" (Howard 1945: 598). The proximal end (Fig. 1, H) associated with the holotype of *Baptornis advenus* by Marsh (1880) would probably belong in Howard's "group V" where the proximal end is less porous and is flattened. It has a single small unfused tarsal which is roughly triangular in shape and is situated between metatarsals II and IV.

A partial skeleton in the collections of the Field Museum of Natural History (FMNH 395) has the tibiotarsi with some of the sutures for the tarsals (Fig. 1, D) still visible. One large tarsal element covers the distal end. The astragalus has not fused and has a long dorsal process. It is completely fused in the adult (Fig. 1, E) but the fusion appears to occur much later in the ontogeny of *Baptornis* than in modern birds.

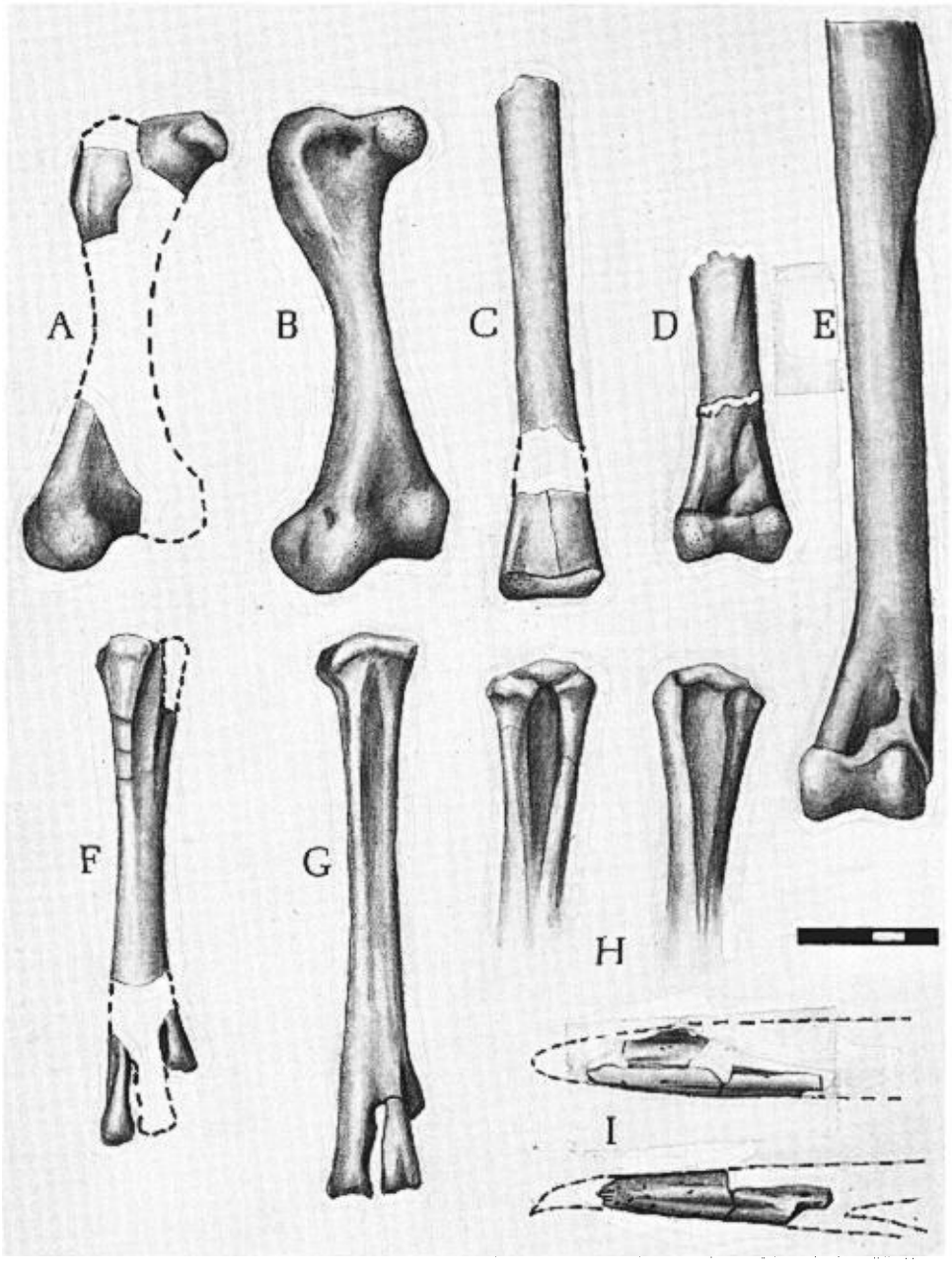

Fig. 1. Comparison of juveniles (A, C, D, F, H, I) and adults (B, E, G) of *Baptornis advenus*: A, KUVP 16112, right femur, anterior view; B, UNSM 20030, right femur, anterior view; C, KUVP 16112, distal end of left tibia, anterior view (tarsals missing); D, FMNH 395, distal end of left tibiotarsus, anterior view (astragaulus not fully fused); E, UNSM 20030, distal end of tibiotarsus, anterior view (fully mature); F, KUVP 16122, left metatarsals anterior view (tarsals missing); G, FMNH 395 left tarsometatarsus, anterior view; H, YPM 5768, anterior and posterior views of proximal end of left tarsometatarsus (tarsal not fully fused); I, KUVP 16112, dorsal and lateral views of premaxillary fragment, scale equals 2 cm.

The Hesperornithiformes are a primitive side branch of the early avian radiation that shares many characters with *Archaeopteryx* and theropod dinosaurs (Martin and Tate, 1976). However the immature *Baptornis* material shows that the major features of the mesotarsal joint must have been fully established before the separation of the Hesperornithiformes from the main avian line. The fusion of the tarsals near the time of the termination of growth was also established before this split.

It seems certain that KUVP 16112 is from a young bird considerably smaller than an adult and lacking the development of many of the grooves and ossified articular surfaces which assist the functioning of the foot. One wonders if such a young bird would be likely to have traveled long distances away from shore or if the skeleton may be interpreted as evidence that *Baptornis* nested in the vicinity of the find.

Over one-third of the known specimens of *Baptornis advenus* have been from immature birds while *Hesperornis*, which is known from many more specimens, has not produced any comparably young individuals. This suggests that the young of *Hesperornis* did not venture so far out to sea as did those of *Baptornis*, or that *Hesperornis* nested in a different region.

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Golden Eagle predation on pronghorn antelope.—The pronghorn antelope (*Antilocapra americana*) and Golden Eagle (*Aquila chrysaetos*) coexist in many parts of the West, but direct observations of golden eagle predation on pronghorns are rare. Burns (1970, Canadian Field Naturalist 84: 301) described in detail the killing of a female fawn which had an estimated weight of 31.7 kg. Lehti (1947, J. Wildl. Mgmt. 11: 348) reported finding a pronghorn carcass believed to have been killed by a Golden Eagle. Although predation by Golden Eagles has been reported for several game species and livestock, most studies show a predominance of lagomorphs in Golden Eagle diets (McGahan 1968, Auk 86: 1).

On 31 December 1974, while censusing pronghorns in a winter concentration ground along Interstate 80, 45 km west of Laramie, Wyoming, I saw a Golden Eagle attack a male pronghorn fawn. The incident occurred at 0745 hours. The fawn was in a herd of 135 pronghorns feeding midway up a small hill. The eagle approached over the top of the hill approximately 10 m above the ground and struck the fawn in the back, momentarily stunning it. Momentum carried the eagle to the ground. The herd ran off in the opposite direction and had traveled 400 m before the eagle again became airborne. The fawn followed the herd, although far behind it.

After the fawn had run about a kilometer the eagle again hit it in the back, injuring it severely. Both fell to the ground. The eagle could not hold on to the fawn, which got up and ran slowly after the herd. After the fawn had run 200 m the eagle struck again and pulled the fawn to the ground with its talons embedded in the fawn's back. After about 30 sec, the fawn stood up with the eagle on his back and charged around in a circle.