

In every aboriginal camp large numbers of dogs are to be found, the native dingo and the mongrels resulting from hybridization with the introduced dogs. Since they perform no obvious useful purpose it has always been assumed that their only function was to serve as pets. Reading, recently, W. H. D. Le Souëff's "Wild Life in Australia" (Christchurch, N. Z., and London, 1907), I came across a passage which very probably contains the real explanation of the aboriginal's domestication of the dog. Le Souëff writes:

I used to wonder why the natives shifted their camp so often, but I don't now, as, although we were only in ours three days, the amount of evil-smelling refuse that the natives had thrown away close to the camp was considerable, and the odour was perceptible on the third day before the camp even came in sight, and being in thick scrub there was not much breeze to carry it off, and flies and ants were attracted in numbers. If we had had several dogs, instead of only one, it might not have been so bad.

Now, in every Australian camp the dogs *do* act as scavengers, but this fact has been overlooked as of no significance. It is only when an observer draws attention to what happens when only *one* dog is present in a small temporary camp, that we can perceive the real importance of the dog in the social life of the individual and of the group.

It is not the stench alone of the decomposing refuse, but the flies and insects and other noxious creatures which this attracts that the dog tends to eliminate, to such an extent indeed that he becomes indispensable. It may be suggested that it was probably the same or a similar complex of reasons that led to the domestication of the dog elsewhere in the world.

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FIRST CASE OF HUMAN INFECTION WITH MESOCESTOIDES

SOME tapeworms recovered from a 13-months old white child at Nacogdoches, East Texas, recently referred to me for identification, were found to belong to a species of *Mesocestoides*. This constitutes the first record of infection of any Primate with adults of this group of tapeworms. The specimens found conform closely in most respects with a species recently found by the writer¹ in raccoons in East Texas, which were referred to the species *M. variabilis* Mueller, 1927, 1928, previously known from foxes and skunks. Species of *Mesocestoides* are characteristically found in carnivores and birds of prey, although one species, *M. latus* Mueller (1927, 1928), occurs in opossums and another, *M. corti* Hoeppli (1925), has been reported from the house mouse. The full life

history of these tapeworms has not been elucidated; a larval sparganum-like form known as a tetrathyrideum has been found in insectivorous reptiles, birds and small mammals, but it seems probable that there is an earlier larval stage in an arthropod. The human infection, however, was probably derived from eating the improperly cooked flesh of some animal harboring the tetrathyrideum stage.

The worms recovered from the child were stated to total over 35 feet, but individual worms have an estimated length of about 40 cm, with a maximum diameter of less than 2 mm. The child harbored the worms for at least several weeks. She was fretful and anemic, had a poor appetite and complained of abdominal pain. The worms were apparently all expelled after two treatments with oleoresin of *Aspidium*, and the symptoms disappeared. A fuller report, with a description of the worms, will be published elsewhere.

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LAND AND WATER AREAS OF THE UNITED STATES

THE Bureau of the Census has just sent to press a publication which provides the first basic remeasurement of the land and water area of the states and counties of the United States to be released since the work of Henry Gannett in 1881. In addition, for the first time, land and water areas are given for each of the 50,000 civil divisions of the counties, a fact which will provide a per-square-mile density basis for census statistics possessing sixteen times the refinement of comparable county densities.

This publication, which is the product of five years of planning, measurement and verification, employed procedures approved in conferences with the U. S. Coast and Geodetic Survey, the U. S. Geological Survey and the General Land Office. Greatly improved maps made it possible to undertake these remeasurements. This work was based on the 1937 series of the U. S. Coast and Geodetic Survey aeronautical charts on a scale of 1:500,000. The area of the United States by states was computed by using geodetic tables based on the Clarke spheroid of 1866 adjusted to conform to the legal ratio of 39.37 inches to the meter. The areas of all thirty-minute quadrilaterals falling entirely within each state, as given by these tables, were combined with the partial areas of thirty-minute quadrilaterals as determined by planimeter measurement. Counties shown on the U. S. Geological Survey and Post Office Department state maps, on scales of 1:500,000 and 1:750,000, respectively, corrected to conform to 1940 boundary conditions, were measured and adjusted to the state totals computed from the aeronautical charts. For the minor civil division and city areas, the best available

¹ A. C. Chandler, *Jour. Parasitol.*, 28, 227-231, 1942.