

a leucocytosis, which brings in the younger neutrophiles, *i. e.*, with one or two lobes, from the bone marrow. If there is enough toxin or bacilli present, these neutrophiles react even with a leucocytosis and, in all such cases, pus has been shown to be present. As the infection disappears, the neutrophiles cease to react and the number of white blood cells drops until the blood picture is again normal. A good prognosis in such an infection as pneumonia would be a high white blood cell count together with a large proportion of the neutrophiles having the smaller number of lobes to the nucleus, for in this case the neutrophiles which react are being used up and new ones brought into the blood to take their place.

The following are a few typical blood pictures:

Normal		Differential Neutrophile	
Differential Blood Count	Count	Count	
W. B. C. 8,000	I. 5		
Neutrophiles 65	II. 22		
Large lymphocytes .. 23	III. 48	48:52	
Small lymphocytes .. 12	IV. 26		
Eosinophiles 0	V. 5		
Basophiles 0			
Tuberculosis			
W. B. C. 10,000	I. 20		
Neutrophiles 64	II. 40	75:25	
Large lymphocytes .. 28			
Small lymphocytes .. 6	III. 30		
Eosinophiles 1	IV. 10		
Basophiles 1	V.		
Pneumonia			
W. B. C. 20,000	I. 30		
Neutrophiles 80	II. 40	80:20	
Large lymphocytes .. 15			
Small lymphocytes .. 5	III. 20		
Eosinophiles 0	IV. 10		
Basophiles 0	V.		
Pus Case			
W. B. C. 24,000	I. 4		
Neutrophiles 80	II. 14		
Large lymphocytes .. 12	III. 18		
	IV. 32	27:73	
Small lymphocytes .. 6	V. 21		
Eosinophiles 1	VI. 9		
Basophiles 1	VII. 2		

The differential blood count is necessary to determine the different kinds of blood cells present in the blood, but the state of the neutrophile is also of great assistance in making the diagnosis and especially the prognosis.

A paper which gives in detail these experiments, which were carried on in the laboratory of Dr. Max Hartmann, in Berlin, will appear shortly; also the hospital observations made in connection with Dr. James Alexander Miller at the Bellevue Hospital will be reported in a paper with Dr. Miller in May.

MARGARET A. REED

NOTES ON THE FOOD OF A KING EIDER

A FEMALE king eider (*Somateria spectabilis*) was captured on Seneca River, N. Y., November 26, 1909, by Mr. J. T. Lloyd. After preserving the bird for the Cornell University Museum (No. 5332), the enteron was opened and examined for its food contents. In view of the scarcity of accurate notes dealing with the food of our wild ducks, the material examined would seem to justify the presentation of the data which follow:

CONTENTS OF THE CROP AND STOMACH

Pisces—1 specimen *Boleosoma nigrum olmstedii*, johnny darter.
 Amphibia—2 specimens *Rana pipiens*, leopard frog.
 Insecta—3 specimens *Gyrinus*, whirligig-beetle.
 Crustacea—67 specimens *Gammarus fasciatus*, fresh-water "shrimp."
 Mollusca—1 specimen *Planorbis*, small, 2 mm. in diameter.

CONTENTS OF THE GIZZARD

Amphibia—Bones of at least one frog.
 Insecta—2 specimens, *Gyrinus*.
 2 specimens, *Corisa*, water-boatman.
 Crustacea—5 specimens, *Gammarus fasciatus*.
 1 specimen, *Asellus*.
 Mollusca—3 specimens, *Physa*.
 1 specimen, *Limnæa*, small.
 1 specimen, *Planorbis*, small, 1 mm. in diameter.
 Several pieces of the shell of some large bivalve.
 Vegetable—2 small seeds not identifiable.
 3 small pieces of the leaves of some aquatic plant.

Mineral matter to the extent of about a dozen grains of sand.

The food in the stomach and crop was very well preserved and it was possible to identify with certainty some of the animals to species—a condition which also obtained rather unexpectedly for a portion of the food in the gizzard, particularly the fresh-water “shrimps.” The question arises: How many of these animals were deliberately pursued by the duck? As far as the vertebrates are concerned, there is no doubt but that they were voluntarily taken. The presence of only a small amount of vegetable matter favors a like assumption for all of the invertebrates mentioned, forms which at this time of year occur almost exclusively in the aquatic vegetation. If they were accidentally taken, it would necessarily have been incidental to a large amount of vegetable material.

The beetles and water-boatmen are erratic and rather rapid swimmers and in all probability would have escaped unless deliberately chased by the duck. The disagreeable acrid odor given off by the former evidently did not protect them to any great degree from the bird.

In all of the unbroken molluscan shells the soft parts of the animals were preserved, indicating that the animals were picked off from the vegetation alive.

The surprisingly large number of fresh-water “shrimps,” in view of their great ability to conceal themselves under shelter of almost any sort, shows without a doubt that they were voluntarily taken; it also gives a further indication of the importance of this group of crustacea in the economy of water-loving vertebrates.

If our assumption is correct that all of these swiftly moving and self-concealing animals were taken voluntarily, we have an example of a keenness of vision capable of discriminating between food and other substances to a degree not usually ascribed to the flat-billed ducks.

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A LARGE SPERM WHALE CAPTURED IN TEXAS WATERS¹

THE capture on our coasts of a whale of any species is a rare occurrence and worthy of note. The present instance therefore seems to me to deserve some especial attention.

On March 10 of the present year I received a telegram from Port Arthur, Texas, informing me of the capture of a huge sperm whale near Sabine, a small town on the gulf, and offering me every opportunity for making a scientific examination of the prize.

The following day I went down to Port Arthur and found that the animal had suffocated in the mud shallows and had been towed ashore. On my arrival the carcass was on exhibition on a board platform back of one of the docks. Owing to the heat, decomposition had already set in and hence no opportunity was afforded of securing histological material. I availed myself, however, of the opportunity of taking a careful series of measurements, which I here put on record. This seems worth while, since there are few, if any, authentic measurements of large whales to be found in the literature.

	Ft.	In
Total length (air line from tip of snout to extremity of tail flanges)	63	6
Circumference in front of pectoral fins ..	37	
Width across tail flanges	16	7
Tip of snout to base of pectoral fin	24	6
Tip of snout to angle of mouth	17	1
Dorso-ventral diameter of flat end of snout	10	4
Tip of lower jaw to angle of mouth	10	10

There were 48 teeth in the lower jaw, each of which fitted into a fleshy depression of the upper jaw, which was toothless except for the occasional presence of very small rudimentary tooth-like structures in the bottoms of these depressions.

On the night of March 12 the animal was eviscerated, with the aid of a gang of about twenty negroes and a steam winch, and the abdominal cavity filled with ice. This was dissection on a large scale and afforded a

¹ Contribution from the Zoological Laboratories, University of Texas, No. 104.