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ATLAS OF GOAT ANATOMY. PART III. MYOLOGY

Clarence E. Hopkins, et al

Edgewood Arsenal
Edgewood, Maryland

April 1973

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ATLAS OF GOAT ANATOMY
PART III: MYOLOGY

by
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Thomas E. Hamm, Jr., CPT, VC
Gary L. Leppart

Biomedical Laboratory

April 1973

DEPARTMENT OF THE ARMY
Headquarters, Edgewood Arsenal
Aberdeen Proving Ground, Maryland 21010

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ATLAS OF GOAT ANATOMY. PART III: MYOLOGY

This work was started in July 1971 and completed in August 1972.

Clarence E. Hopkins, Sr., Thomas E. Hamm, and Gary L. Leppart

Myology
Goat Atlas
Superficial dissection
Deep dissection
Head
Neck
Thoracic
Pectoral limbs
Pelvic limbs
Musculature
ATLAS OF GOAT ANATOMY

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Task 1T061101A91A15

DEPARTMENT OF THE ARMY
Headquarters, Edgewood Arsenal
Aberdeen Proving Ground, Maryland 21010
FOREWORD

The work described in this report was authorized under Task 1T061101A91A1, In-House Laboratory Independent Research. This work was started in July 1971 and completed in August 1972.

In conducting the research described in this report, the investigators adhered to the "Guide for Laboratory Animal Facilities and Care," as promulgated by the Committee on the Guide for Laboratory Animal Resources, National Academy of Sciences—National Research Council.

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I. INTRODUCTION.

The Angora goat (Capra hircus) has been the main experimental animal used by the Biophysics Division, Edgewood Arsenal, Maryland, for many years. Knowledge of goat anatomy is important during both the planning and experimental stages of projects. Because no readily usable information on goat anatomy is available, a series of reports on the subject is being prepared. The first in the series described the skeletal anatomy. The second in the series described the cross sections of the Angora goat. The present report concerns the muscles on superficial and deep dissection of the head, neck, and pectoral and pelvic limbs of the Angora goat. Part IV, Internal Organs, which will describe the structures of each organ, is near completion.

II. MATERIALS AND METHODS.

Three castrated Angora goats were used for dissecting purposes. Each goat was anesthetized with pentobarbital sodium. The goat was then suspended in a metal frame by ropes attached to the horns, tail, and nuchal ligaments with its feet just touching the floor of the frame (figure 1). This was done so that the goat would not be distorted.

Figure 1. Goat Suspended in Metal Frame


The goat was then exsanguinated through a polyethylene cannula (0.106-inch ID) placed in the carotid artery. The body was perfused with 12,000 ml of formalin solution passing through a gravity flow system from a stand 10 feet above the floor. This fluid was allowed to flow slowly through the system until the exiting fluid had a distinct odor of formalin.

The goat remained in the frame at room temperature until the next day. At that time the animal was dissected. After the skin was removed, each muscle was dissected and drawn. A total of 26 drawings was made while the dissection was taking place (figures 2 through 27).

The nomenclature prescribed in Nomina Anatomica Veterinaria was used for labeling the drawings. The anatomy books of Sisson and Grossman and May and the excellent book by Miller et al. were also used as references during preparation of this atlas.

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