

ilium, so that it appears like two muscles. According to these two directions of the fasciculi, it is *inserted* in two ways; the fibres from the ilium into the anterior part of the inner border of the femur, the pectineal fibres into the femur posterior to the others. In *Phoca* the iliacus does not exist according to Duvernoy; Murie gives a description of it, and Humphry states that it was represented by a few fibres.

In *Macrorhinus leoninus* it *arises* from the outer half of the ventral surface of the ilium, and the inner half of the ventral border of the wing. It lies below the origin of the rectus toe th outer side of the insertion of the psoas magnus. It passes backwards and inwards, and joins the middle third of the outer side of the ilio-femoralis posterior. In all the specimens this muscle, when present, takes origin between the insertions of the psoas magnus and minor, but in *Macrorhinus* the magnus is posterior to the iliacus. Its name is due to the fact that it joins the ilio-femoralis posterior, and comes from the ventral surface of the ilium.

In *Arctocephalus gazella* it is a slender fasciculus, and *arises* from the ventral surface of the ilium between the ventral posterior spine and the pectineal eminence, and from the anterior or ventral sacro-iliac ligament. The psoas tertius lies upon it, and is adherent to its fibres, from origin to insertion. The course is the same as that of the psoas tertius, but the fibres of the iliacus are fixed to the capsule of the hip. It is *inserted* into the superior small surface of the small trochanter of the femur above the psoas tertius (Pl. VII. fig 7). In Murie's description of the iliacus, the lumbar and iliac fibres are made a common muscle. I made the dissection by cutting away the psoas tertius (Murie's iliacus) near its insertion and drawing it backwards, and found the iliacus fibres upon the ventral surface of the ilium, having a different point of insertion into the lesser trochanter.

The muscles of the ilio-femoral region situated on the posterior and anterior spines of the ilium, and around the pectineal eminence along the inner side of the femur to the inner condyle, can only be differentiated by following closely the fibres from origin to insertion. The bulk of the muscles are not divided by well-defined fibrous septa as in many other Mammals, and the smaller muscles especially are in consequence difficult to isolate. The points of origin must be sought for and considered beforehand, otherwise many artificial muscle bundles would be formed and confusion result from divisions made. This has been most carefully attended to with this group, as they are so closely applied that no definite result could have been otherwise obtained. In the small specimens, the smallness of the space available for work, the fineness of the fibres, and the presence of a quantity of fat added considerably to the difficulty of the problem. However, sufficient evidence was obtained to put beyond doubt that a psoas primus, secundus, and tertius were present in all but *Macrorhinus leoninus*, which lacks the tertius, and that in all three there is a distinct iliacus. In the Phocinæ this muscle is supplied by the anterior crural nerve.

The interpretation of the muscles called "ilio-femoralis et lumbalis anterior" springing from the psoas magnus and the posterior ventral spine, "ilio-femoralis anterior" from the posterior ventral spine, "ilio-femoralis posterior" from the pectineal eminence, and "lumbo-femoralis" from the psoas minor presents no intricacy. All these are inserted into the inner border of the femur with trifling variations as to extent and locality. Some are directly connected with the psoæ, or are in close proximity to their insertions. From this we see that all these various origins maintain a connection with the psoæ, and that they are the representatives of it in the thigh.