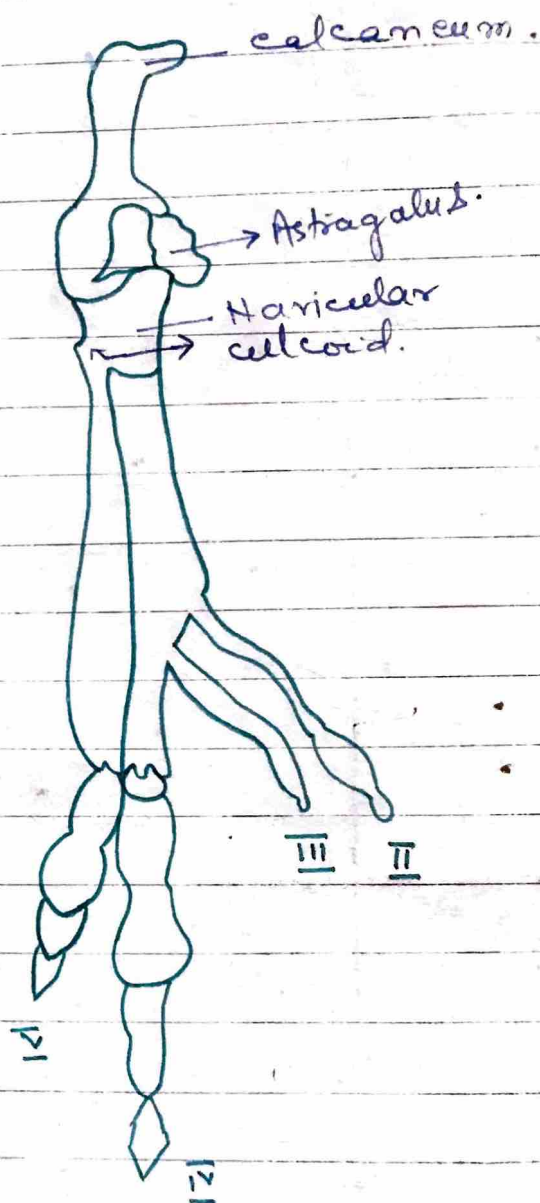


Atlas of macropus  
(ventral view).



### Circulatory system:->

1. The heart is completely divided into 4 chambers.
2. Auriculo-ventricular valve membranes.

### Nervous system:->

1. The brain is small and poorly developed.
2. The olfactory lobes are comparatively larger (but the cerebral hemisphere is very large).
3. Corpus callosum is either absent or much reduced.

4. The ~~Coeca~~ of uterine is very much coiled.

### Urinogenital System: →

1. Kidney is metanephric.
2. In both the sexes the ureters pass between the genital duct.
3. A common sphincter muscle surrounds the anus and the urinogenital aperture forming a shallow cloaca.
4. The testes are extra-abdominal and lie inside the scrotal sac (Penis).
5. Penis is bifurcated.
6. In female, there are two uteri and often one pair of vagina is present.
7. Fertilization is internal and monospermic.

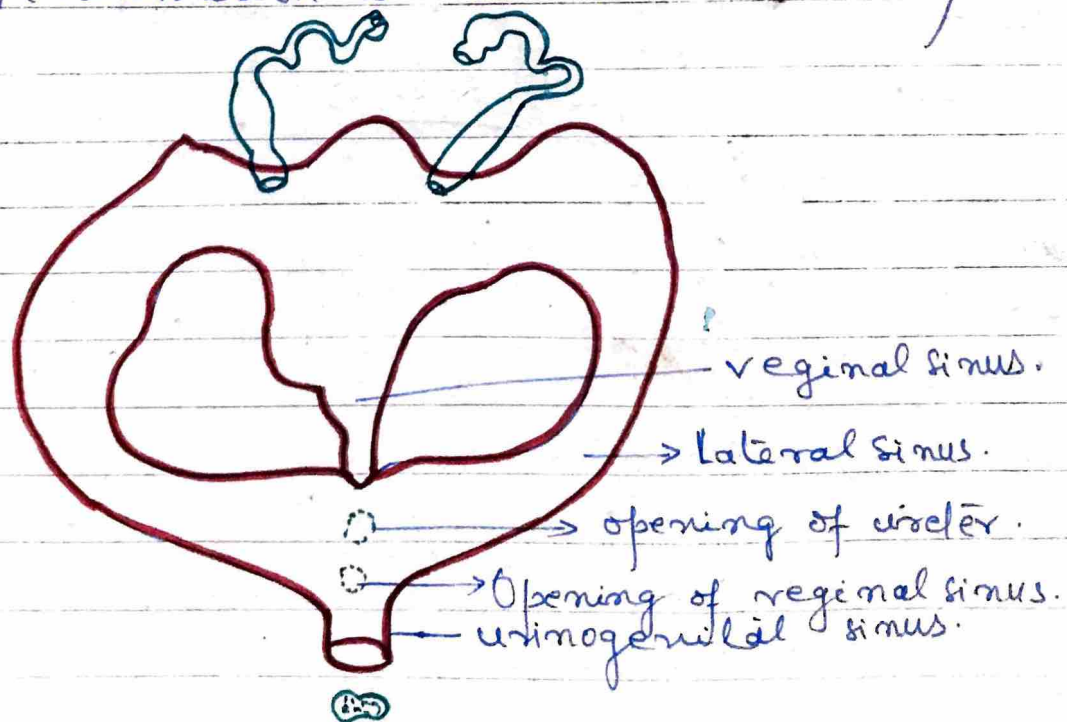


Fig → female genital organ of Marsupial

## Affinities of Metatheria: →

The marsupials shows affinity with the following groups: →

### (A) Affinity with Reptiles: →

#### Similarities: →

1. Alisphenoid forms the bulla-like reptiles.
2. Presence of epi-pubic bone in both the groups.
2. Both have stapes.

#### Dissimilarities: →

1. Metatheria are viviparous while the Reptiles are oviparous.
2. Microcithal egg present in metatheria and absent in Reptiles.
3. External pinnae present in Metatheria are absent in Reptiles.
4. Placenta ~~absent~~ <sup>Present</sup> in Metatheria are ~~present~~ <sup>absent</sup> in Reptiles.

### (B) Affinities with Monotremes: →

#### Resemblance

1. Skull is similar in general organization.
2. Presence of epi-pubic bone in both.
2. Presence of clavicle in both.
4. Presence of corpus callosum in both.
5. Presence of cloaca.
6. Absence of well defined allantoic Placenta.

#### Differences

1. Metatheria are viviparous and development proceeds inside the uterus of