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The Role of Pelvic Spurs

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In the *Boinae* the pelvic spurs are modified scales, located either side of the cloacal region and usually comprised of just one scale. They do not appear to be linked to any bone structure and unlike other scales they have a high degree of mobility and can be moved by appropriate musculature from their normal position, lying along and against the body, into a perpendicular plane to resemble miniature legs.

The author has observed mating activity in the following species of python; Carpet/Diamond Python (*Morelia spilotes*), the Ant-hill python (*Liasis perthensis*), Children's Python (*L. childreni*) and the Woma (*Aspidites ramsayi*).

In all species the mating behaviour is similar. The pelvic spurs are usually held in the "erect" position and used by the male (at least) to stimulate the female. The male at all stages of the mating act has a tendency to dig his pelvic spurs into the female's body. Whilst crawling over the female the male's spurs will scratch the surface of the female snake often making a distinct scratching sound. On other occasions the male's spurs will move rapidly in and out, up and down, again to stimulate the female snake. This supports the theory that the pelvic spurs have a sexual role and refutes any claims that they perform no useful function in modern day *Boinae*.

Pelvic spurs are, however, not restricted to the *Boinae* - some Australian legless lizards (*Family Pygopidae*) possess spurs resembling those of the pythons. This is in addition to their rudimentary hind limbs.

Conclusion

As I am not an osteologist I cannot really draw firm conclusions as to the origins of the pelvic spurs in snakes and other reptiles. I do however question the long held assumption that they arose from degenerate legs. I suggest that pelvic spurs should be considered as auxiliary sexual organs.

Investigations into the mating habits of Australian *pygopids*, including the Burton's legless lizard (*Lialis burtonis*) is urgently required, to clear up doubts over this issue.

Acknowledgement

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