since this procedure is designed to demonstrate basic proteins.

In summary, electrophoresis of nuclear histones isolated from chick embryos from gastrulation to 7 days of age does not reflect ontogenic changes in continuing embryonic development. The gradual increase in the basic/acidic amino-acid ratio of histone preparations as gastrulation is completed suggests an association of histones with other nuclear proteins during this early stage.

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Effect of Deprivation of Water on the Dorcas Gazelle

IN a previous communication[1] we stated that the Dorcas gazelle *Gazella dorcas dorcas* (L.) requires water or succulent food in order to maintain homeostasis in desert conditions. It loses weight steadily on a diet of dry sorghum (millet) without water. Feeding ceases when 14–17 per cent of normal body weight has been lost and the animals appear weak and emaciated. This may take up to 12 days under winter conditions at Khartoum when the air temperature ranges between about 10° C (50° F) and 30° C (84° F) with a relative humidity varying from 20 to 40 per cent; but, in summer, when the air temperature fluctuates from about 35° C (95° F) to 45° C (113° F), with a relative humidity varying from 10 to 30 per cent, gazelles cannot survive for more than about 5 days without water. Two experimental animals died after 6 days' water deprivation, during which they lost 24 per cent of their original weight. This contrasts with a loss of 30 per cent which can be tolerated without ill effects by the camel[2] and about 12 per cent which can be withstood by man and most other mammals[3].

During desiccation, the blood urea of gazelles increases from 5–10 mg/100 ml. to 70–110 mg/100 ml. (In the animals that died it reached a figure of 225 mg/100 ml.) At the same time, the haemoglobin content of the blood increases from 14–18 g/100 ml. to 20–29 g/100 ml., the haemocrit from 40–55 per cent to 55–59 per cent and the plasma protein from 4·5–5·5 g/100 ml. to 5·5–7 g/100 ml. These results, accompanied by an increase in electrolytes, indicate a decrease in extracellular water and a concentration of the contents of the body fluids, even though urine production is reduced from about 200–700 ml. to 30–80 ml./day and the amount of water lost with the faeces is reduced to half. The experimental work has been carried out by L. I. G.

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Sex Ratios of Some Mason Wasps (Vespoidea and Sphecoidea)

MALE hymenoptera are haploid and develop from unfertilized eggs, while females are diploid and the product of a fertilization. A female is inseminated early in her imaginal life and, at least in the Apocrita, subsequently exercises control over whether or not a sperm will be made available for a given egg. Most of the exploitations of the non-random production of the sexes seem to depend on this psychic capacity to determine whether a given egg will develop into a female or a male. Among solitary forms, male and female eggs are frequently laid in different situations. The three social groups produce very few males, all during a restricted period of the annual cycle. In the Symphyta and the "Parasitica", the rarity of males may be further augmented by the evolution of thelytocous parthenogeneses, which also occur sporadically in the social forms. An excess of females has been assumed to be typical of the order because the females of the solitary bees and wasps produce few eggs (fifty-two is regarded as the record for such wasps[1]), and their elaborate maternal behaviour patterns would seem to expose them to dangers which the males can avoid. Recently, Hamilton[2] has even suggested that because a female contributes twice as much genetic material to the Mendelian population as a male, a selection pressure exists to produce females preferentially.

Table 1 gives the sexes of those animals which have emerged in the laboratory, omitting those developing from eggs laid during the then unfinished year, 1965, and those of species of which less than ten individuals have been reared. All data except those for one family of *Sceliphron madraspatanum*[3] have been collected in Bhubaneswar since August 1962. For most of the animals

Table 1

	Potters		Squatters	
	♂	♀	♂	♀
Family Vespidae subfamily Eumeninae				
Eumenes campaniformis esuriens (Fabr.)	29	36		
E. emarginatus conoideus (Gmel.)	16	35*		
E. pyriformis pyriformis (Fabr.)	3	13*		
Antodynerus flavescens (Fabr.)			124	76†
Rhynchium (2 spp.) (Fabr.)			28	4†
Subancistrocerus sichelii (Saussure)			24	18
Family Sphecidae subfamily Trypoxylinae				
Trypoxylon pileatum (Smith)			21	35
subfamily Sphecinae				
Chalybion bengalense (Dahlb.)			109	74†
Sceliphron madraspatanum (Fabr.)	23	26		

* Significantly different from equality at the 0·05 level.
† Significantly different from equality at the 0·01 level.