Calendar of Nature Topics

'Old Wives' Summer'

Towards the end of September in central Europe there is often a period of calm clear weather, with cold nights and misty mornings but fine warm days. This is the 'Old Wives' Summer'; it has been explained as the transition between summer and winter conditions. In summer, the pressure distribution over central Europe is dominated by the Azores anticyclone, from which a wedge of high pressure extends across southern France and south-west Germany. In winter the dominant feature is the great Siberian anticyclone, from which a long arm extends across Switzerland. There is, however, a short period of transition during which the Azores anticyclone has retreated to the Atlantic while the Siberian anticyclone has not yet developed. During this interregnum, which, on the average, occurs between September 18 and 22, an anticyclone develops over southern Germany north of the Alps, and this brings the fine weather of the 'Old Wives' Summer'. Later in the month, the anticyclone drifts away eastwards, and in Russia the 'Old Wives' Summer' occurs at the end of September or the beginning of October.

Greatest Frequency of West Indian Hurricanes

The revolving storms or 'hurricanes' of the West Indies are among the most dreaded of all natural phenomena, and since the first colonisation of Central America they have caused enormous loss of life and property. In recent years, they have been studied intensively and an elaborate system of hurricane warnings has been organised. The majority of hurricanes originate over the open ocean between about lat. 10° N. and 20° N., travel westwards or north-westwards across the West Indies, and after re-curving towards the north-east, either strike the Gulf States and die out over the land, or continue over the ocean parallel with the Atlantic coast. The great majority occur in August, September and October, and in recent years a number of severe hurricanes have been experienced about the third week of September. New Orleans suffered great damage from a hurricane on September 20, 1909, and another storm which crossed the West Indies and the south-eastern States on September 22–30, 1916, gave a wind velocity of 140 m.p.h. at the mouth of the Mississippi. Florida was struck by a hurricane on September 19, 1926, and great damage was done in the West Indies about September 24, 1929.

A Great Hawk Migration in Ontario

On September 19, 1931, Manly Miner saw such a migration of hawks as has seldom or never been recorded, in spite of the incredible numbers which annually cross Essex County in Ontario every September and October. His own words give an extraordinarily vivid description of this outstanding movement: "The number of hawks present could scarcely be made believable to one who had not seen them. Some witnesses thought there were as many as fifty thousand present. Circling flocks could be seen with the naked eye for two miles in any direction and with glasses more were visible at a greater distance. By counting the number in a single flock I estimated that between ten and twenty thousand hawks were passing within sight.

"High in the air Broad-wing, Red-shouldered and Red-tailed Hawks circled, sailed four or five miles and circled again. To my surprise, lower down an occasional Osprey or Fish-Hawk passed, not circling like the others but flying much faster and not mixing with them. Near to the ground were many Sharp-shinned and Cooper's Hawks with occasional Sparrow and Pigeon Hawks.

"I have seen as many hawks in a whole day but never before such numbers in less than an hour as on this occasion. It was between eight and nine o'clock in the morning and I conclude that the birds probably congregated for the previous night in some near-by woods and were starting out together on their day's travel. They were progressing at varying speeds and by night would very likely be spread out for fifty or a hundred miles" (*Canadian Field Naturalist*, Nov. 1932, p. 191).

Breeding Ewes

The financial success of sheep farming depends very largely on the number of lambs reared for each ewe in the flock, and in ordinary farming the condition of the ewe is far more important in deciding the number of twin births than that of the ram. There is no doubt that the plane of nutrition of the ewe has a great deal to do with her fertility. Hence the practice of 'flushing' the ewes just before the mating season. After weaning, the ewes are kept in rather hard condition and then at about this season of the year they are admitted to better food rich in protein; a piece of fresh young aftermath, a fold of rape or mustard, or even an addition of some concentrated food to their ordinary rations. The ewes come to the ram in rising condition and a heavier fall of lambs is the result. Excessive fatness in breeding ewes is to be avoided as a well-known cause of shy breeding and sterility.

Societies and Academies

PARIS

Academy of Sciences, July 31 (*C.R.*, 177, 365–432). The president announced the death of Edouard Quénu, member for the Section of Medicine and Surgery. A. LACROIX : A stony meteorite which fell in Morocco on August 22, 1932. R. FOSSE, P. DE GRAEVE and P. E. THOMAS : The transformation of the intermediate term of the permanganate oxidation of uric acid into allantoic acid, in the presence of the soya ferments and of potassium cyanide. CHARLES NICOLLE and L. BALOZET : Man is insensible to inoculation of the aphthous virus of known types, even in the form of a latent infection. CHARLES NICOLLE, J. LAIGRET and P. GIROUD : The transmission of typhus by bites and by ingestion of infected fleas. The ape can be infected by flea bites, rats by ingestion of infected fleas. The infections produced were of the latent type, none of the animals showing febrile symptoms. B. CABRERA and H. FAHLENBRACH : Diamagnetism and temperature. PAUL PASCAL and BONNMEMAN : The reversible passage of the dimetaphosphates to the condensed salts of Graham. Study of the metaphosphates produced by the dehydration of silver acid pyrophosphate and by heating silver hypophosphate at varying temperatures. G. B. GOUREWITCH : The