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منظمة
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Locusts, other migratory pests and emergency operations group

DESERT LOCUST SITUATION SUMMARY AND FORECAST

No. 60 AUGUST - BEGINNING OF SEPTEMBER 1983

SUMMARY

A number of small swarms reached Pakistan from the west in August and one reached north-west India. There have been good rains over much of the summer breeding of Pakistan and in parts of Rajasthan. There has been widespread breeding particularly in the Tharparkar desert, Las Bela district and Barmer and Jaisalmer districts. Elsewhere summer rainfall has generally been below average and only small numbers of adults have been reported for Saudi Arabia and Sudan.

W/Q4822

DESERT LOCUST SITUATION AUGUST - EARLY SEPTEMBER 1983

WEST AFRICA

Meteorology

The position of the Intertropical Convergence Zone (ITCZ) was at about 20°N over Mauritania and Mali, the vicinity of Agades and over Lake Chad. Numerous sandstorms were reported via the Global Telecommunications System (GTS) and confirmed by cloud photographs (visible and infra-red Meteosat imagery).

The following rain was recorded north of 15°N: 6mm at Tessalit and Gao on 4 August, 14mm at Agades and 3mm at Tidjikja on 7 August, 9mm at Agades on 14 August, 3mm at Tidjikja on 20 August, 38mm at Matam on 23 August, 11mm at Mombori on 26 August, 4mm at Agades on 27 August and 16mm at Kidal on 28 August. Later, during the first decade of September very significant rain fell in the region of Nema, which recorded 77mm on 9 September.

Midday temperatures ranged from 30°C during thunderstorms to 45°C in dry weather.

Breeding Conditions

NOAA/AVHRR vegetation index imagery of the second decade of August indicates that breeding conditions were favourable only in limited areas of the region. Localized areas with green vegetation were observed in the Bouressa Basin, Adrar des Iforas and in the wadis between In-gall and Agades in Aïr between 17-18N and 7-840E. The seasonal locust breeding areas in Mauritania were obscured by extensive cloud-cover on 19 August but the rains have generally been very low in this part of the region and breeding conditions may be assumed to be generally unfavourable.

Locusts

No reports of locusts have been received.

NORTH-WEST AFRICA

Meteorology

Some weak disturbances associated with low pressure areas temporarily affected the Maghreb but disintegrated under the influence of high pressure systems.

Amongst the rainfall amounts reported by the GTS were 2mm at Adrar and Tamanrasset on 3 August and 11mm at Tamanrasset on 7 August. At the beginning of September a weak stormy tendency was observed over Morocco but it was not associated with significant rainfall. Several sandstorms were noted but they were not on a large scale.

Midday temperatures ranged from 25°C in coastal areas to 45°C in the Sahara.

Breeding Conditions

The summer breeding areas in southern Algeria were observed to be unfavourable during this period.

Locusts

LIBYAN ARAB REPUBLIC

In the second half of June, third-fifth instar hoppers and medium density groups of gregarious adults were observed over 140 ha at Qaraat Zikia (2817N/0955E) south of Ghadames. They were controlled using 15 750 kg BHC bait, effectiveness 90% for hoppers, 70% for adults.

As a result of a build-up of populations of Desert Locust (70%), African Migratory Locust (20%) and grasshoppers (10%) at Kufra (2421N/2315E), two aircraft and ground teams were sent to the area to control hoppers of all stages and mature adults. Between 26 June and 30 July, the aircraft applied 4 800 litres liquid pesticide over 2 400 ha and the ground team applied 4 262 litres liquid pesticide and 25 340 kg BHC bait over 2 742 ha.

During August Libya was reported free of Desert Locusts.

MOROCCO

Morocco was reported clear in June and July.

There were no other reports from the region.

EASTERN AFRICA

Meteorology

The ITCZ moved progressively south to about 15°N in the second half of August. Heavy rains and thunderstorms were recorded during this period. El Obeid received 52mm on 3 August (long term average for the month 143mm). Sennar recorded 37mm on 5 August and 68mm on 6 August (long term average 160mm); also on 6 August Demazine recorded 100mm (long term average 203mm); on 14 August En Nahud recorded 65mm (long term average 137mm); on 15 August Demazine recorded 42mm and Wau 61mm, while on 16 August Malakal recorded 41mm and Wau 29mm.

Ethiopia also received frequent rain, Asmara recorded 114mm and Diredawa 55mm during the first decade of August. There was generally light rainfall at Hargeisa in northern Somalia. Convective rainfall was recorded in Kenya, Uganda and Tanzania.

Midday temperatures were generally in the range 25-35°C except in highland areas such as in Ethiopia where the maximum in Addis Ababa only reached 15°C during rainy spells.

Breeding Conditions

The NOAA/AVHRR vegetation index imagery acquired for the Red Sea area on 20 August showed that the locust breeding habitats in Ethiopia, Djibouti and northern Somalia were extremely dry and that the potential for population development was at a very low level in the region. Also the interior of northern Somalia was generally dry.

Locusts

SUDAN

On 5-6 August scattered adults were found in Wadi Habub (1841N/3610E) and Wadi Amil (1830N/3627E). Groups of adults were reported from two localities in the Sinkat (1850N/3751E) area later in the month but no further details are available.

There were no other reports from the region.

NEAR EAST

Meteorology

The quasi-permanent depression over Arabia gave rise to very variable winds and generally hot dry weather. The ITCZ was sometimes accompanied by strong winds which resulted in sandstorms and also by thunderstorms, such as that which resulted in 36mm or rain at Sulaiyil on 2 August, and rain from 13-16 August in the Jizan area where the maximum total was 6mm in 24 hours.

Midday temperatures ranged from 35°C in coastal areas to 45°C in inland areas.

Breeding Conditions

NOAA/AVHRR vegetation index imagery of 20 August showed that conditions for locust breeding in the region were generally unfavourable. The coastal plains of Saudi Arabia, Yemen AR and Yemen PDR as well as the interior areas were mostly dry. Small areas with green vegetation conditions were observed in Yemen PDR west of Shuqra at 131°N/4525°E and at 133°N/4605°E. In Oman a localized green area was observed at 205°N/5820°E.

Locusts

KINGDOM OF SAUDI ARABIA

Solitarious adults at 200/ha were found over 5 sq km at Khabt Sayed in the Jizan area. A single locust was found in cultivations in Wadi Dawasir.

There were no other reports from the region.

SOUTH-WEST ASIA

Meteorology

The monsoon, accompanied by numerous storms, maintained its influence over most of India and Pakistan. There was frequent heavy rain in the summer breeding areas, particularly in Pakistan where Karachi recorded 335mm during August, while Hyderabad recorded 100mm on 18 August. There was frequent rain in Rajasthan, Barmer recording 86mm, Jaisalmer 116mm, Ganganagar 92mm, Sikar 224mm, Jodhpur 232mm and Bikaner 157mm.

Breeding Conditions

NOAA/AVHRR vegetation index imagery acquired over the Indo-Pakistan summer breeding areas on 30 August showed that due to extensive rains in India and Pakistan during July/August, ecological conditions are very suitable for breeding over large areas in both countries. In Pakistan extensive very green areas were observed in Las Bela region between 25-26°N and 6640/6725°E and in the Indo-Pakistan border area south of the line Mirpur Khas and Barmer between 25-26°N and 6940/7050°E. Also very large areas around Jaisalmer between 26-27°N and 70-7140°E were observed to have suitable ecological conditions. Furthermore, patchy vegetation development was observed over a 180 x 40 km wide strip in the border area north of Jaisalmer between 2730/2755°N and 70-7150°E.

Further rains affecting substantial areas in early September created prolonged suitable ecological conditions in large parts of the desert areas in both countries.

Locusts

PAKISTAN

Three swarms mature measuring 0.25, 10 and 6 sq km were found in Las Bela district on 2, 7 and 11 August having entered Pakistan from the west. Control operations were undertaken but some laying occurred. On 12 August gregarious hatching occurred and further control was undertaken against a total of 2310 concentrations and bands of first and second instar hoppers.

Further control operations were undertaken in the second half of the month against adult escapes and further immigrants on eight occasions.

In the Tharparkar, Nara and Cholistan deserts initially solitary breeding occurred in the Ismailgarh district and in 16 localities of the Tharparkar and Nara deserts but later group formation occurred in some areas. A total of 2 157 hopper concentrations and groups of later instar hoppers and fledglings were controlled over an area of 460 sq km by aircraft and ground teams using 3 356 kg BHC dust, 6 319 litres 10% dieldrin and 80 litres 98% fenitrothion.

Solitary adults were recorded at numerous localities in the Tharparkar, Khipro, Nara and Cholistan deserts.

INDIA

Control operations by ground teams continued against hoppers in Barmer, Bikaner, Jaisalmer and Jodhpur districts and were supplemented by aerial spraying with effect from 26 August. A total of 3867 ha were treated using 10% BHC dust and dieldrin/aldrin.

On 31 August a yellow and grey swarm measuring 2x2 km entered India in the Tanot district (2742N/7024E) and was observed copulating. The swarm was sprayed from the air using 400 litres 18% dieldrin.

There were widespread populations of scattered adults in Barmer, Bikaner, Jaisalmer, Jodhpur, Nagaur and Sri Ganganagar districts.

AFGHANISTAN was reported clear in July.

There were no reports from IRAN.

FORECAST FOR OCTOBER-NOVEMBER 1983

There have been very good rains over parts of the Indo-Pakistan summer breeding areas and successful breeding has occurred, necessitating aerial and ground control operations. Elsewhere rainfall in the traditional summer breeding areas has been light except in the Bouressa Basin in north-east Mali.

In South-West Asia a third generation of breeding is likely to occur in those parts of the summer breeding areas in India and Pakistan which received abundant rain in July, August and September, notably the Tharparkar desert and Jaisalmer and Barmer districts. In other areas numbers are likely to decrease as adults emigrate to Baluchistan and South-East Iran. Considerable numbers of adults are likely to remain in the summer breeding areas.

In the Near East considerable numbers of adults may reach Oman and United Arab Emirates from the east and some may reach Yemen PIR. The fate of the swarms reported in Yemen PIR in July is unknown but it is now likely that they will move to coastal and sub-coastal areas of western Yemen PIR or southern Yemen AR and possibly start to breed. Small numbers of adults are likely to occur on the Tihama of Yemen AR and Saudi Arabia and small scale breeding is likely to start.

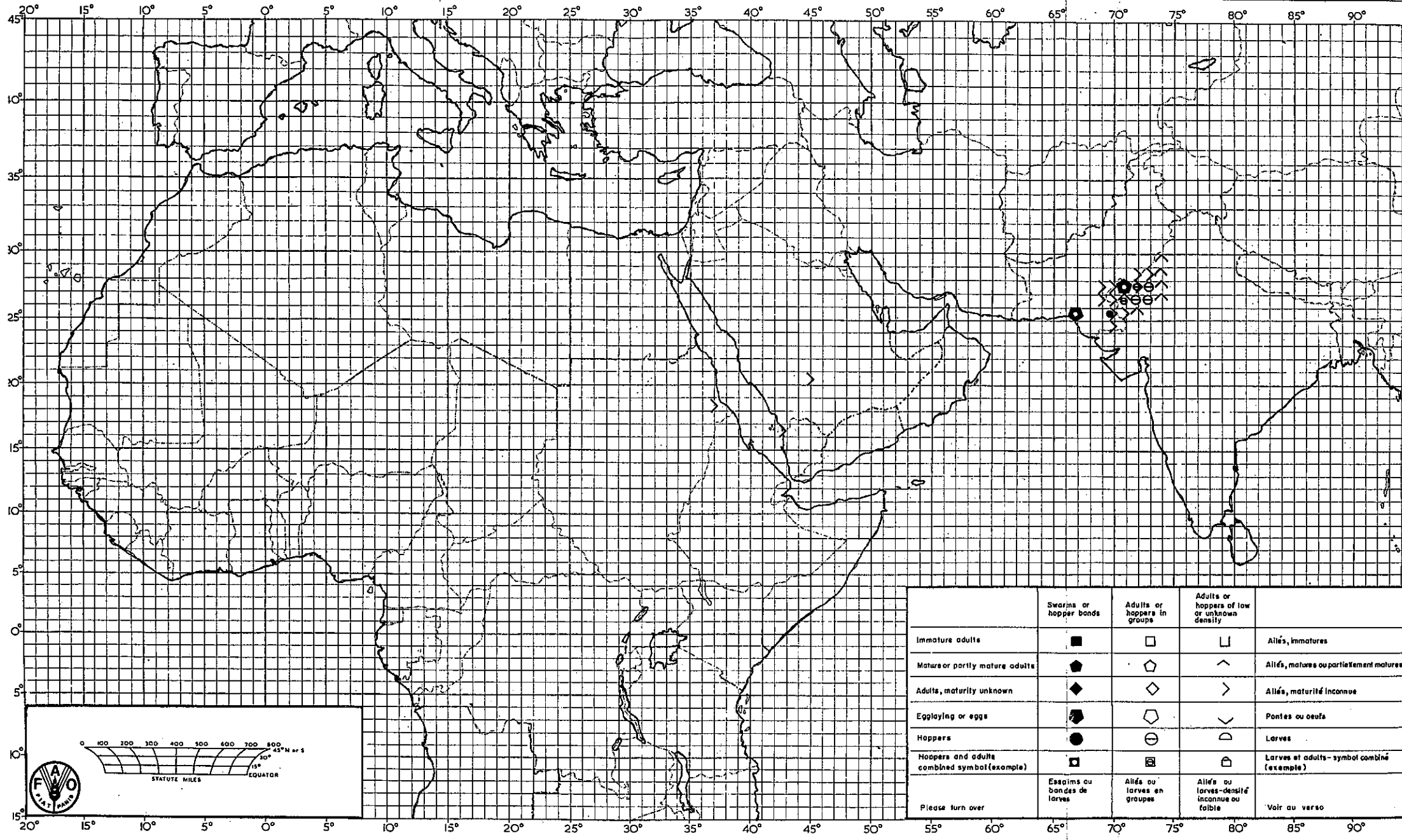
In Eastern Africa considerable numbers of adults are likely to concentrate in the Tokar delta and other coastal areas of Sudan and northern Ethiopia which have received summer floods and breeding will commence in the forecast period. Adults, perhaps in considerable numbers, may reach Djibouti, north-west Somalia and Eastern Ethiopia from Arabia and breeding could commence in the first two areas.

In West Africa conditions have generally been unfavourable for breeding except in the Bouressa basin. Breeding has almost certainly occurred there, although its extent is unknown. Elsewhere only small numbers of adults are likely to have been produced on summer rains.

In North-West Africa small numbers of adults are likely to reach southern, central, eastern and western Algeria from the south during October/early November. Small numbers of adults may persist in cultivated oases in Libya.

Rome, 19 September 1983

Desert Locust Situation Summary No. 60 AUGUST-EARLY SEPTEMBER / AOUT-DEBUT DE SEPTEMBRE



	Swarms or hopper bands	Adults or hoppers in groups	Adults or hoppers of low or unknown density	
Immature adults	■	□	◻	Alliés, immatures
Mature or partly mature adults	●	◐	∧	Alliés, matures ou partiellement matures
Adults, maturity unknown	◆	◇	>	Alliés, maturité inconnue
Egglaying or eggs	◼	◑	∨	Pontes ou oeufs
Hoppers	●	⊖	∩	Larves
Hoppers and adults combined symbol (example)	◻	◻	◻	Larves et adultes - symbol combiné (exemple)
Please turn over	Essaims ou bandes de larves	Alliés ou larves en groupes	Alliés ou larves - densité inconnue ou faible	Voir au verso