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Locusts, other migratory pests and emergency operations group

DESERT LOCUST SITUATION SUMMARY AND FORECAST

No. 59 JULY - EARLY AUGUST 1983

SUMMARY

Despite control operations in the People's Democratic Republic of Yemen at least one swarm was produced from local breeding and further breeding is likely. One swarm, which arrived from the west, was successfully controlled in Pakistan. There were considerable numbers of adults in the summer breeding areas of Pakistan and India and in the latter country limited control operations were undertaken against hoppers. Limited breeding was in progress in the Red Sea Province of Sudan. Small numbers of adults were reported from northern Somalia and Saudi Arabia.

W/Q4489

LOCUST SITUATION, JULY EARLY AUGUST 1983

WEST AFRICA

Meteorology

The Intertropical Convergence Zone (ITCZ) remained at approximately 20°N with a wave over Mauritania and Mali. Several sandstorms were associated with it, e.g. at Tessalit on 2 July and Atar on 3 and 9 July. Rain accompanying a stormy tendency was very variable and several localities received above average amounts during the first decade of July. Tidjikja received 23 mm. Gao received 3 mm and Tombouctou 8 mm on 7 July, while Nema recorded 26 mm on 9 July. During the second decade Tidjikja and Nema received above average rain, recording 24 and 25 mm respectively. Gao received 5 mm and Kayes received 6 mm on 14 July; San 18 mm on 15 July, Zinder 13 mm, Kayes 21 mm and Nara 46 mm on 16 July, Gao 23 mm on 17 July, Agades 16 mm and Birni-N'Konni 20 mm on 19 July.

During the third decade there was further variable rain. Zinder received several showers totalling 34 mm on 27 July. Agades received 5 mm, Maradi 10 mm, Niamey 24 mm, Ouahigouya 33 mm, Ouagadougou 63 mm on 30 July. On 31 July the Segou area was subject to heavy showers, Segou recorded 54 mm. Aioun el Atrouss recorded 66 mm during the month. On 1 August Maram received 6 mm, Zinder 11 mm, Nara 15 mm and Maradi 18 mm. The last sandstorms reported via the GTS were at Tessalit on 23 July. Maximum temperatures at midday ranged between 36 and 44° but fell to the region of 25°C during storms.

Breeding Conditions

NOAA/AVHRR vegetation index imagery coverage for the last decade of July indicates that breeding conditions in this region were generally not very favourable. However, a substantial green area was observed in southern Mauritania between Aioun el Atrouss and Kiffa at 1600-1750N and 1030-1140W. Breeding conditions in northern Mali/Niger were unfavourable except for localized areas in the Bouressa Basin in the Adrar des Iforas where substantial green vegetation development was observed. OCLALAV reported green vegetation in Aouker between 1712N and 1733N and 0928W and 0943W.

Locusts

No locusts were reported.

NORTH WEST AFRICA

Meteorology

In the first decade of July the evolution of some weak disturbances of Atlantic origin were followed using Meteosat imagery as they moved successively from Morocco to Libya. At the same time there were several storms but according to GTS data daily rainfall rarely exceeded 4 mm. The dry weather persisted during the second and third decades in spite of several cloudy periods. Midday temperature ranged from about 28°C in coastal areas due to sea breezes to about 44°C in the interior desert areas.

Breeding conditions

As reported in Summary No. 58 AVHRR imagery for 6 July revealed large areas of green vegetation in the extreme south of Algeria at 19°N, 3-4°E and another area between 1940 N, 4-5°E. However, by late July the vegetation had dried up.

Locusts

No locusts were reported.

EASTERN AFRICA

Meteorology

There were moderate showers in the Ethiopian highlands during July and the first decade of August. Asmara recorded 16 mm on 19 July, 30 mm on 26 July, 26 mm on 31 July and 18 mm on 1 August. Gondar recorded 33 mm on 16 July. There were also some showers on the Red Sea coast around Assab on 18 and 19 July.

Several sandstorms were observed in Somalia, particularly around Belet Uen on 23 July and 1 August. There were light to moderate rains around Hargeisa during July and the first decade of August. In these countries mid-day temperatures were generally in the range 25-35°C in the interior but reached 35-42°C in coastal areas. There were no data from Sudan.

In Kenya, Uganda and Tanzania there were convection storms but daily rainfall totals rarely exceed 20 mm. Mid-day temperatures were around 30°C except during showers.

Breeding Conditions

The vegetation was dry on the north-western coast of Somalia in early July but scattered patches of green vegetation were observed in the Odweina area (0924N/4503E).

As reported in Summary No. 58, AVHRR imagery for 10 July indicated that conditions were generally unfavourable for breeding along the Red Sea and Gulf of Aden. AVHRR imagery for 17 July showed that breeding conditions were generally unfavourable on the coastal plains of Eritrea, in Eastern Ethiopia and on the coastal plains of northern Somalia due to the absence of green areas. The interior of northern Somalia was covered by extensive cloudmasses thus preventing assessment of vegetation biomass conditions.

Locusts

SOMALIA

A total of 10 adults were observed in north-west Somalia between Berbera and Silil during a ground survey from 16-30 June. On a further ground survey of the coastal and sub-coastal plains of north-west Somalia west of Berbera from 7-10 July 4 adults were seen.

ETHIOPIA

4 adults were captured in Asmara during July.

SUDAN

During July solitarious adults at densities of 120-240/ha were found at five localities between Sinkat (1850N/3656E) and Haya (1820N/3618E) and fourth and fifth instar hoppers and fledglings were reported in the Haya area over an area of 100 ha. On 5-6 August scattered adults were found in Wadi Habub (1841N/3610E) and Wadi Amil (1830N/3627E).

There were no reports from other parts of the region.

NEAR EAST

Meteorology

The large permanent low pressure area over the Arabian peninsula gave rise to only a few localised showers. Thus, showers were reported around Sana on 4 July according to GTS data. Further information from ground survey teams reported showers in the Yemen PDR, particularly in the El Khadeh area of wadi Markhah on 7 July around Ataq on 17 July and Mudiyah on 18 July. The predominant wind near the coast of Yemen PDR and over the Gulf of Aden was south-westerly at speeds of up to 27 knots, but along the coast it was south-south-east due to the sea breeze effect and reached 20 knots. In all cases maximum daily temperatures were in the range 40-50°C.

Breeding Conditions

The NOAA/AVHRR vegetation index imagery coverage of 17 July indicates that breeding conditions on the Tihama of Saudi Arabia and Yemen AR and the interior of Saudi Arabia were generally unfavourable during July. The areas which were observed to have favourable breeding conditions in Yemen PDR during early July were obscured by cloudcover during the middle of the month. The extensive green area, observed in southern Oman during May was observed to have dried out and conditions were unfavourable for breeding in southeastern Arabia during July.

Locusts

PEOPLE'S DEMOCRATIC REPUBLIC OF YEMEN

As reported in Summary No. 58, 937 bands and 203 groups of fledglings were controlled by exhaust nozzle sprayers over 30 sq km in the Ahwar area, over 40 sq km in the Bir Faddle and Hisn Bilaid areas, over 10 sq km in the Masib area and over 12 sq km in the El Khaber area between 25 June and 6 July using 1491 litres of 20% Dieldrin. A swarm of unknown dimensions was reported at Al Khashah on 6 July and possibly the same one at Qatn on 9 July flying eastwards. A loose group of adults was reported flying east in Wadi Hadhramaut at 1600N/4853E on 26 July. High density immature and mature and completing solitarious adults and second to fifth instar solitarious hoppers mixed with Locusta adults were observed in scattered sorghum fields between Bir Masal (1325N/4559E) and Al Khaber (1325N/4600E) on 4 July. Low density scattered solitarious adults were observed over 1 sq km at Radum (1403N/4738E) on 16 July.

KINGDOM OF SAUDI ARABIA

During June and July a total of 29 solitarious adults were found at Dhahran (1740N/4330E) in Wadi Dawadir, Medina and Sajir (2516N/4435E).

UNITED ARAB EMIRATES A single adult was found in the Alawir area on 28 July.

GULF OF ADEN

Six isolated grey locusts flying west were reported from a ship at position 1225N/4708E at 1207 hours GMT on 12 July. At 0900 hours GMT on 25 July an isolated immature adult was found on board a boat at position 1240N/4920E when the surface wind was south-west 5 knots. On 13 August a ship reported sailing through yellow locusts for two hours at position 1220N/4625E; surface wind south-west 18-23 knots.

There were no reports from elsewhere in the Region.

SOUTH-WEST ASIA

Meteorology

The vast low pressure area corresponding to the summer monsoon maintained itself over the Indian sub-continent while a ridge persisted near the Caspian Sea. This circulation in the northern sector over Pakistan accounts for the sandstorms reported by ground teams around Rahimyar Khan and Bahawalpur on 2 and 3 July, as well as the showers which followed them. On 1 July there were widespread heavy rains in Tharparkar district, Chhore recorded 120 mm during the first fortnight of July. In India, according to GTS data, there were important rains in the Surat area where more than 150 mm fell on certain days, such as 20 July; moreover rains were frequent but of very variable intensity. In Rajasthan Barmer recorded 77.7 mm, Jaisalmer 133.2 mm, Sri Ganganagar 268.6 mm, Sikar 291.9 mm, Bikaner 160.5 mm and Jodhpur 252.4 mm.

Breeding Conditions

NOAA/AVHRR vegetation index imagery of 12 July showed that the summer breeding areas of both India and Pakistan were still extremely dry. Some areas in the centre of the scheduled desert area of India and a part of Sind and the Lasbela region of Pakistan were cloudcovered which likely indicates the arrival of the monsoon. Ground reports indicated that the rains of early July have created favourable breeding conditions in the summer breeding areas.

Locusts

PAKISTAN

A medium density 4 sq km swarm from the west was successfully controlled by exhaust nozzle sprayers at Wingoi (2535N/6636E) in late July. During the first fortnight of July scattered adults were found at 23 localities in Mirpurkhas, Uthal, Sukkur and Dera Murad Jamali districts, the maximum density being 2000/sq km at Guresh (2921N/6813E). In the second fortnight the maximum density had risen to 14500/sq km.

INDIA

Control operations were undertaken against solitarious second to fifth instar hoppers and fledglings over a total of 25 sq km in Jaisalmer and Bikaner districts using 4450 kg 10% BHC dust and 100 litres 30% aldrin.

Scattered adults were present in many localities in Barmer, Bikaner and Jaisalmer districts and also in Jodhpur, Sri Ganganagar, Jalore, Banaskantha and Bhuj districts, the maximum density being over 20 000/sq km at these localities in Barmer and one locality in Bikaner districts.

AFGHANISTAN was reported clear in June.

There were no reports from IRAN.

FORECAST FOR SEPTEMBER-OCTOBER 1983

There have been good monsoon rains over much of the Indo-Pakistan summer breeding areas. There are large numbers of solitarious adults and during the second generation it is likely that some groups of hoppers and adults will form and possibly some swarmlets. In the Central Region some escapes have occurred in Yemen PDR which may breed within Yemen PDR during the forecast period.

Breeding has commenced on the western slope of the coastal mountains in Sudan and is likely to continue. Widespread but generally low density breeding will occur in Niger, Mali and Mauritania.

In West Africa conditions have become generally unfavourable for breeding but widespread, generally low density breeding must be expected to occur in various localities in Air and Tamesna of Niger, Tamesna, Adrar des Iforas, Tilemsi and Timétrine of Mali, Hodh, Tagant, Adrar and Inchiri of Mauritania.

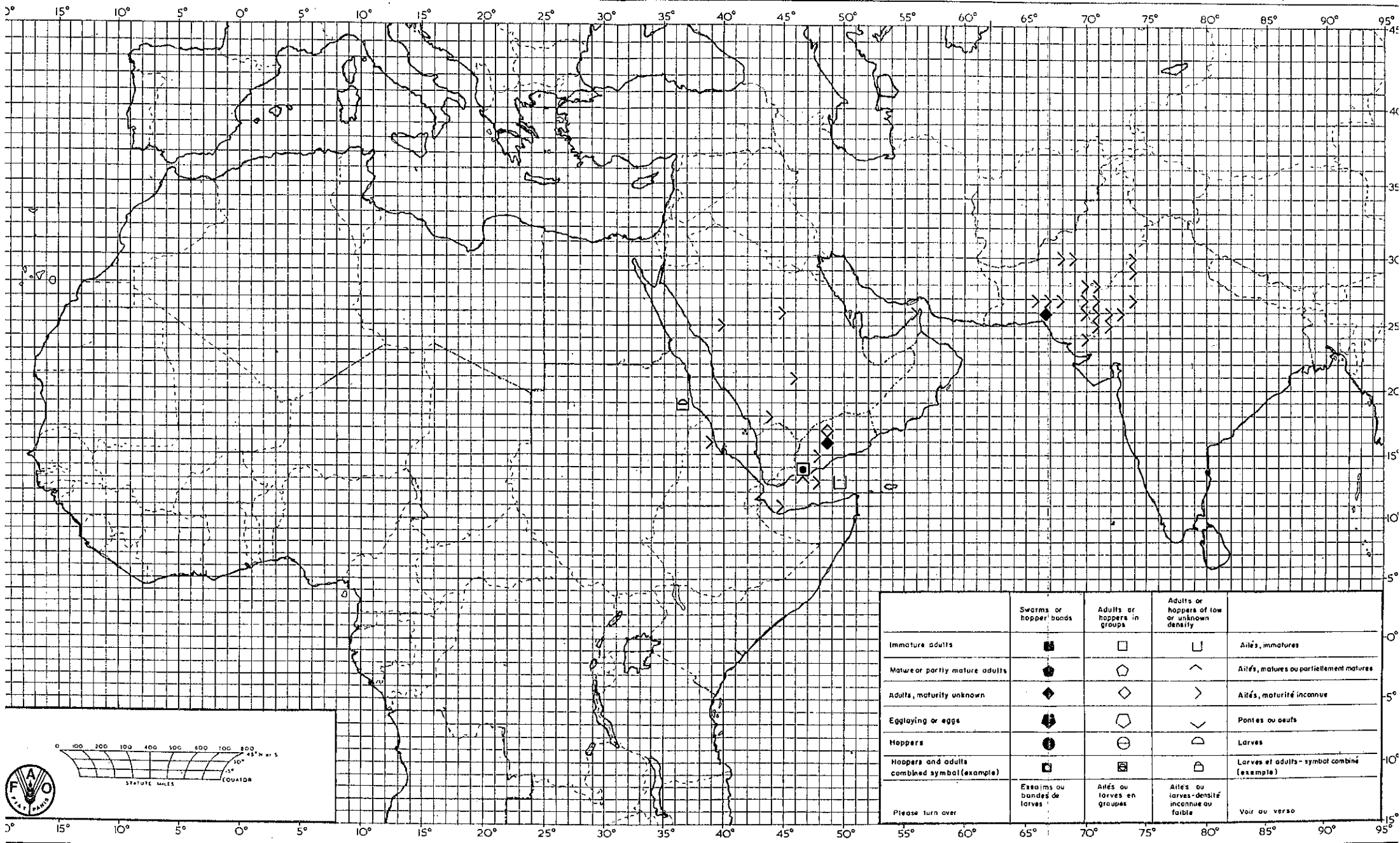
In North-West Africa very limited breeding may occur in the extreme south of Algeria if the area receives further rainfall.

In Eastern Africa a second generation of breeding may occur to the west of the coastal mountain range/^{in Sudan} Considerable numbers of adults are likely to reach and concentrate in the Tokar delta and other coastal areas which have received summer floods and breeding could commence towards the end of the forecast period. Adults, perhaps in considerable numbers, may reach Djibouti, Eastern Ethiopia and north-west Somalia from Arabia towards the end of the forecast period. Small numbers of adults will persist on the coastal plains of northern Somalia and may breed if conditions become favourable.

In the Near East breeding may occur in eastern Yemen PDR if conditions are favourable. Otherwise the adults reported in July are likely to move westwards and could breed in coastal, sub-coastal and interior areas of western Yemen PDR and southern Yemen AR, if conditions are favourable. Considerable numbers of adults may reach northern Oman and United Arab Emirates towards the end of the forecast period. Small numbers of adults will occur in the Tihama of Saudi Arabia.

In South-West Asia there will be widespread breeding in Rajasthan of India and the Cholistan, Nara, Khipro and Tharparkar deserts and Las Bela district of Pakistan. This may be on a scale sufficient to produce some hopper bands and considerable numbers of adults. If the monsoon withdraws early the adults are likely to move west to Baluchistan and some may reach south-east Iran.

Rome
24 August 1983



	Swarms or hopper bands	Adults or hoppers in groups	Adults or hoppers of low or unknown density	
Immature adults	■	□	⌋	Ailés, immatures
Mature or partly mature adults	●	◐	⌋	Ailés, matures ou partiellement matures
Adults, maturity unknown	◆	◇	⌋	Ailés, 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	Eswarms ou bandes de larves	Ailés ou larves en groupes	Ailés ou larves - densité inconnue ou faible	Voir au verso

