



联合国  
粮食及  
农业组织

FOOD AND  
AGRICULTURE  
ORGANIZATION  
OF THE  
UNITED NATIONS

ORGANISATION  
DES NATIONS  
UNIES POUR  
L'ALIMENTATION  
ET L'AGRICULTURE

ORGANIZACION  
DE LAS NACIONES  
UNIDAS PARA  
LA AGRICULTURA  
Y LA ALIMENTACION

منظمة  
الأغذية  
والزراعة  
للأمم  
المتحدة

Via delle Terme di Caracalla, 00100 Rome, Italy

Cables: FOODAGRI ROME

Telex: 610181 FAO I

Telephone: 57871

AGP Division

## Locusts, other migratory pests and emergency operations group

# DESERT LOCUST SITUATION SUMMARY AND FORECAST

NO. 90 FEBRUARY - EARLY MARCH 1986

### SUMMARY

Patchy gregarious breeding was in progress in western Saudi Arabia and along the Red Sea coast of Sudan. Control was completed south of Jeddah in February but was continuing north of Jeddah, and in Sudan and Egypt. Any escapes are likely to move towards the interior of Sudan. Small numbers of adults will persist in Mauritania, Mali and Niger and low density breeding will occur in Baluchistan of Pakistan.

## DESERT LOCUST SITUATION, FEBRUARY - EARLY MARCH 1986

### WEST AFRICA

#### Meteorology

The Intertropical Front (ITF) progressed slowly and very irregularly towards 10°N. Several localised northward pulls were associated with mid-latitude disturbances. The evolution of disturbances of this type could be followed using Meteosat infra-red imagery. One such was very well developed on 18 March, with a very large disturbance extending from Burkina Faso and Mali to Libya which gave up to 100 mm of rain in 24 hours. During another disturbance, thermoconvective activity extended north of 10°N; Sikasso recording 137 mm on 28 February. Several strong sandstorms were recorded during the period, particularly in Mauritania.

Maximum temperatures were generally in the range 30-37°C in interior areas and 20-27°C in coastal areas.

#### Breeding conditions

No rain was reported from the breeding areas but green vegetation persisted in Maktair, El Mreyye, Adaffer and Aouker of Tichit in Mauritania, and around In Abangharit in Niger.

#### Locusts

No locusts were reported and no surveys were undertaken.

### NORTH-WEST AFRICA

#### Meteorology

As mentioned under West Africa, numerous depressions and disturbances of Atlantic origin crossed the region from west to east giving heavy rain preceded by sand storms. Among daily totals reported by the GTS were 26 mm at Agadir on 3 February, 11 mm at Bechar on 7 February, 21 mm at In Amenas on 9 February, 44 mm at Agadir on 28 February, 7 mm, 16 mm, 17 mm and 23 mm at Djelfa, El Golea, Timimoun and Ghardaia on 5 March. Meteosat IR imagery indicated there was rain further south but GTS station totals are not available. Maximum daily temperatures were generally in the range 25-30°C in the Sahara while in coastal regions they ranged from 25°C in warm sectors to 15°C with the arrival of cold fronts.

#### Breeding conditions

No information is available but conditions will have become suitable for breeding in the Sahara.

#### Locusts

No locusts were reported.

EASTERN AFRICA

Meteorology

Due to the eastward moving mid-latitude depressions the position of the Red Sea Convergence Zone was very variable, ranging from 15° to 25° N. February was dry along the Red Sea coast of Sudan but a further 26 mm fell at Port Sudan on 6 March. No rain was reported from the northern coastal plains of Somalia. The permanent low pressure (1005 millibars) over Sudan and Uganda resulted in warm dry north-easterly winds over northern Sudan, whilst instability over Tanzania, Kenya and Uganda propagated itself slowly northwards to the Ethiopian highlands. Diredawa received 23 mm on 19 February.

Maximum daily temperatures reached 40°C in Sudan but were no more than 25°C in the Ethiopian highlands.

Breeding conditions

On the Red Sea coast of Sudan breeding conditions were favourable south and north of Port Sudan (which has received 186 mm since October, compared with the long-term average of 100 mm) during February. By mid-March vegetation on the plains south of Port Sudan to Karora was drying out, but was still green in Khors. North of Port Sudan the vegetation was also green in Khors.

There was no information from Ethiopia, Djibouti or Somalia.

Locusts

SUDAN

Infestations of all stages were present throughout the period on the Red Sea coastal plain of Sudan. During February there were small and medium sized hopper bands of all instars and fledglings in the Port Sudan-Tokar sector which were being controlled by ground teams and one aircraft from DLCO-EA. A total of 1000 litres of Diazinon, 800 litres of Fenitrothion and 400 litres of Dieldrin were applied.

On 24 February a ground survey revealed the presence of mature adults and egg-fields north of Port Sudan.

During early March aerial and ground control continued and by the middle of the month only pockets of adults and hoppers were present, between Tokar and Mohamed Gol.

In the northern sector mature adults and egg-fields were present west of Halaib in early March.

(There were also widespread populations of the African Migratory Locust on the Red Sea coastal plains north and south of Port Sudan, and reports of adults from Equatoria Province, where breeding had been in progress since November).

## ETHIOPIA

There were unconfirmed reports of 'large numbers of locusts' on the Eritrean coastal plains in February and early March.

There were no other reports from the Region.

## NEAR EAST

### Meteorology

As reported in Summary No. 89 and earlier in this Summary, numerous eastward moving Mediterranean depressions of Atlantic origin were reactivated as they crossed the northern Red Sea before moving to Eastern Arabia. One depression gave the following rain: 11 mm at Abu Dhabi, 12 mm at Ras al Khaimah, 19 mm at Buraimi and 38 mm at Seeb on 1 February and 18 mm at Thumrait and 41 mm at Seeb on 2 February. From 5 to 9 February there were strong sandstorms associated with a new disturbance but no heavy rain. The second decade was calm but there was further rain over eastern Arabia on 19-20 February. Sharjah received 12 mm, Seeb 19 mm, Sur 26 mm and Saiq 42 mm on 19 February, while Qaisumah received 8 mm on 20 February.

After another period of relatively calm weather, further convective instability originating over the Red Sea extended to the centre of the peninsula giving heavy rain over western and central Saudi Arabia for three days; Abha reported 13 mm, Qassim 19 mm on 1 March, and Bisha 10 mm and Khamis Mushait 18 mm on 2 March. On the following day another disturbance followed the axis Cairo-Dubai and gave 14 mm of rain at Hofuf on 6 March. Further disturbances moving eastwards to Iran and Afghanistan were detected on Meteosat IR imagery. On 19 March a new disturbance originating over the Red Sea gave rain in Aden.

Maximum temperatures were very variable, depending on the origin of the air mass, but were generally in the range 20° to 33°C.

### Breeding conditions

The frequent rainfall resulted in favourable breeding conditions on the central and northern Tihama and in inland wadis. Conditions were also favourable for breeding in parts of the South-Eastern Desert of Egypt and on the Gulf of Aden coast of FDR Yemen.

### Locusts

#### KINGDOM OF SAUDI ARABIA

Ground control operations continued in the Qunfidah Tihama until 23 February when the area was reported clear. The Lith Tihama was cleared in early February.

North of Jeddah numerous small mature swarms appeared and split up:

- at Badr (2345N/3850E) control was undertaken against a mature egg-laying swarm seen on 9 February; it scattered over 12 square kilometres, but groups of adults were present at densities of 20 per square metre. On 10 February another mature copulating swarm was controlled 36 kilometres south of Badr. This scattered over 20 square kilometres, adults in patches at densities of up to 15 per square metre. On the following day adults had further scattered and were present at densities of 50-100 per hectare.
- in the Umm Lejj (2503N/3715E) area a 1 square kilometre mature swarm was controlled 26 km south of Umm Lejj on 17 February, as well as groups of adults at densities of 30 per square metre over  $\frac{1}{2}$  kilometre but hatching occurred on 1 March. On 18 February a 1 square kilometre copulating swarm was controlled 80 km north-east of Umm Lejj. On 19 February there was further control against a mature swarm measuring 800 m x 1300 m in patches at densities of up to 30 per square metre in the same area, and on 22-23 February control was undertaken against laying swarmlets over an area of 50 square kilometres. By 1 March the area was reported clear.
- 70 kilometres east of Yenbo (2405N/3802E) groups of mature adults and first instar hopper bands were controlled.
- in the Rabigh area groups of mature adults scattered over 1 square kilometre were controlled on 15 February. Later, groups of laying adults were controlled over an area of 80 square kilometres.

Scattered mature, copulating and laying adults at densities of 200-300 per hectare and third to sixth instar hoppers and fledglings at densities of 500-600 per hectare were present 20 kilometres south-west of Mecca on 22 March.

Adults were controlled using Fenitrothion, Malathion and BHC applied by ground sprayers. Hoppers were controlled by dusting with BHC.

#### EGYPT

A mature swarmlet reached Abu Ramad from the south-east on the evening of 5 February during a sandstorm and scattered over 10 kilometres along the Red Sea coast. Egyptian teams were controlling adult and hopper infestations in Wadi Di-ib in Sudan.

There were reports of adults in wadi Allaqi in mid-March.

PDR YEMEN was reported clear between December 1985 and February 1986. IRAQ was reported clear in January.

There were no other reports from the Region.

SOUTH-WEST ASIA

Meteorology

Eastward moving Mediterranean depressions brought variable rainfall to Baluchistan during February. Jiwani recorded 34 mm on 2 February and there was localised rainfall in Kharan, Nushki, Turbat, Panjgur and Pasni between 1 and 3 February. Another disturbance gave light rain at Turbat and Khuzdar on 8-9 February. On 11-12 February there were widespread heavy rains in Khuzdar, Panjgur, Pasni, Uthal and Karachi. There were further heavy rains on 17-20 February in Pasni, Turbat, Quetta, Nushki, Kharan, Khuzdar, Panjgur and Uthal areas. During the month Quetta received 280 mm, Pasni 141 mm, Panjgur 32.6 mm and Khuzdar 38 mm.

Over India continental high pressure (1025 millibars) was progressively replaced by reactivated westerly disturbances which gave variable rainfall in the summer breeding area.

Maximum daily temperatures were very variable, ranging from 12°C at Quetta to 31°C in Gujarat.

FORECAST FOR APRIL-MAY 1986

Winter-early spring breeding along the Red Sea coasts of Saudi Arabia, Sudan and probably Ethiopia will terminate. Despite control measures there may be considerable numbers of escapes. Most are likely to move south-west into the interior of Sudan but there may be further breeding in the interior of north-west Saudi Arabia.

In West Africa scattered adults will persist in areas of greener vegetation in Mauritania, north-east Mali and north-west Niger. If there is significant pre-monsoon rain north of 17°N breeding is likely to commence but it will initially be at low density.

In North-West Africa there may be low density breeding in a few localities in the Algerian Sahara.

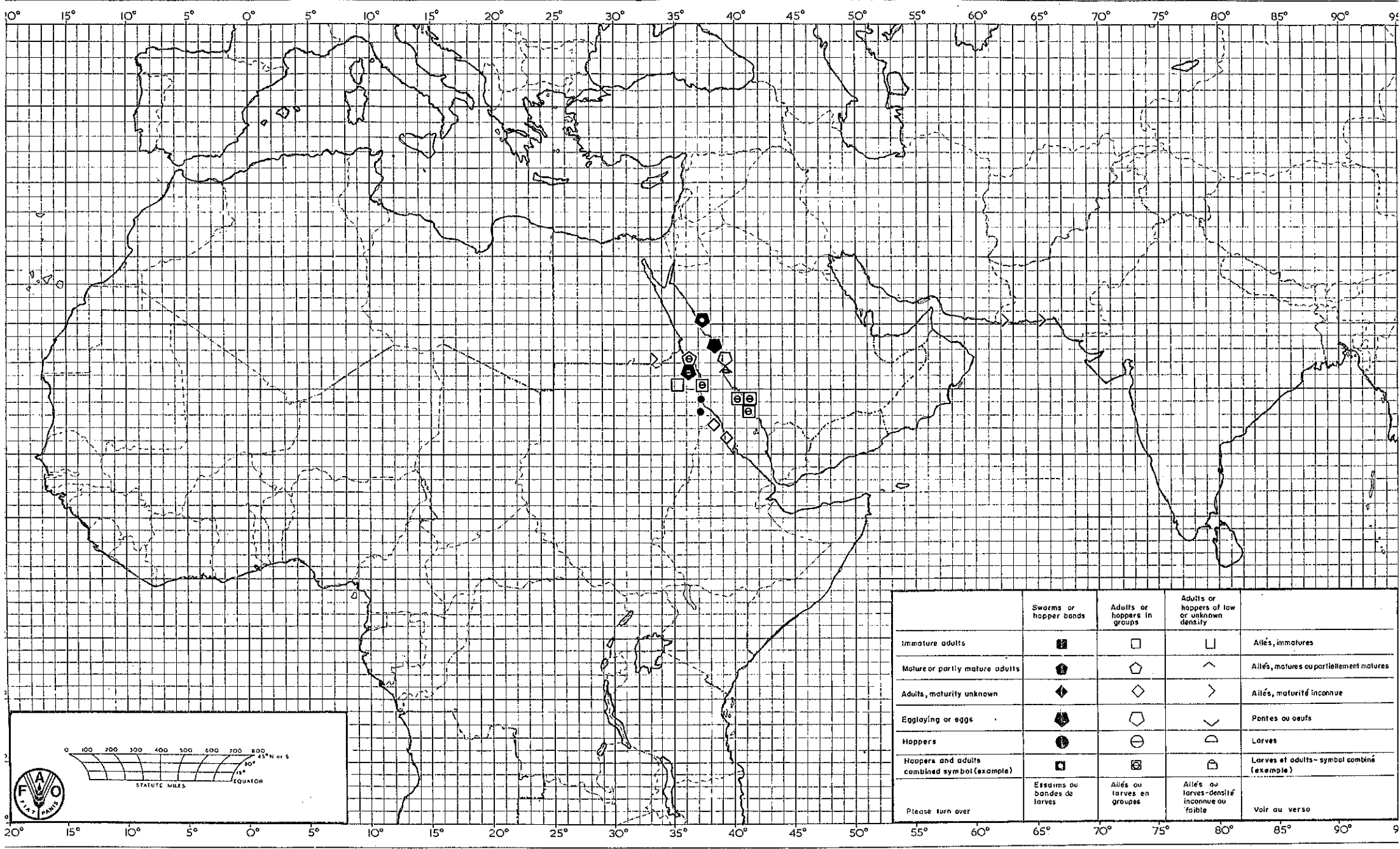
In Eastern Africa winter-spring breeding along the Red Sea coast of Sudan and probably Ethiopia will come to an end. There may be considerable numbers of escapes, particularly from northern Ethiopia possibly including one or two small swarms and these will move into the interior of Sudan. They may also be augmented by some escapes from Arabia. Small numbers of adults may be present on the coastal plains of northern Somalia.

In the Near East breeding will end on the Red Sea coastal plains of Saudi Arabia but may continue in interior areas in the north-west of the country. Despite control measures some escapes may occur and these will probably move south-west across the Red Sea. Low density breeding may occur in coastal and some interior areas of PDR Yemen.

In South-West Asia initially low density breeding is likely to occur in coastal and interior areas of Baluchistan, and may occur in Las Bela district. Numbers of adults will increase in the Tharparkar, Khipro, Nara and Cholistan deserts of Pakistan and Rajasthan of India due to immigration from the west.

Rome, 25 March 1986

# Desert Locust Situation Summary No. 90 FEBRUARY-EARLY MARCH/FEVRIER DEBUT MARS 1986



|                                              | 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                     |
| Egg laying 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 | Ailés ou larves en groupes  | Ailés ou larves - densité inconnue ou faible | Voir au verso                                |

