

FOOD AND AGRICULTURE ORGANIZATION OF THE

ORGANISATION DES NATIONS UNIES POUR L'ALIMENTATION

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## Locusts, other migratory pests and emergency operations group

# DESERT LOCUST SITUATION **SUMMARY AND FORECAST**

No. 66 FEBRUARY - EARLY MARCH 1984

SUMMARY

The overall situation remained calm. Groups of adults and small numbers of hoppers were reported from the Red Sea coast of Sudan and small numbers of adults were reported from Saudi Arabia, People's Democratic Republic of Yemen, Pakistan and India. The situation in West Africa and North-West Africa is calm.

## DESERT LOCUST SITUATION. FEBRUARY - EARLY MARCH 1984

## WEST AFRICA

## Meteorology

The ITCZ started to progress north; meanwhile rainfall remained localised in Gulf of Guinea coastal areas and over the ocean. Meteosat imagery showed there were frequently stormy convective cells essentially extending from Liberia to Cameroon, from time to time passing to the south of the Ivory Coast and Togo.

In the Sahel, numerous sandstorms were reported by the GTS, particularly in Mauritania and Mali.

Daily maximum temperatures were about 25°C in coastal areas but frequently exceeded 30°C in inland areas.

## Breeding conditions

According to NOAA/AVHRR composited imagery for the period 21 to 29 February 1984, conditions are unfavourable for breeding throughout the Recession Area in West Africa.

## Locusts

NIGER

According to a late report there were large areas of green Schouwia south of In Abangharit in December 1983. In one area of one hectare there were 500-600 grey and rosy-grey fledglings as well as fourth and fifth instar yellow-green hoppers with black markings. Isolated adults continued to be present in January.

There were no reports of locusts in the OCLALAV area during February.

#### NORTH-WEST AFRICA

#### Meteorology

Frequent cyclogenesis was observed over the Mediterranean in addition to the passage of Atlantic depressions. This explained the heavy rain in Algeria and Tunisia, while Morocco was frequently under the influence of the Azores anticyclone which reduced the effects of the depressions. Meanwhile an Atlantic depression affected almost all Morocco on 27 February.

The following significant rain was reported via the GTS:

50 mm at Bejaia, 33 mm at Constantine on 3 February

27 mm at Jendouba on 10 February

15 mm at Annaba on 15 February

14 mm at Jendouba on 18 Feburary

16 mm at Algiers on 23 February

16 mm at Oujda on 24 February

17 mm at Oran on 25 February

Finally, concerning the rains of 27-28 February, 47 mm were reported at Tangiers and 58 mm at Meknes in the space of 24 hours.

## Breeding conditions

According to NOAA/AVHRR imagery favourable breeding conditions in the recession area were confined to the Kufra and Sarir oases and to the oases between Tasawah and El Fugaha in the Fezzan.

## Locusts

MOROCCO was clear in January. LIBYA was clear to 15 February.

## EASTERN AFRICA

## Meteorology

Meteosat imagery showed that eastern Sudan was affected by the Red Sea Convergence Zone but clouds associated with it did not give rise to rain. Its mean position was about 20°C although there were fluctuations to both north and south. Dry weather in the Sudan was associated with daily maximum temperatures between 28° and 38°C. Dry weather also predominated over Ethiopia, Somalia and Djibouti throughout most of the month. On 29 February, however, thunderstorms extended northwards into Ethiopia and Diredawa reported 165 mm on that day. Meteosat detected thundery convective clouds, becoming progressively more active towards the south.

The GTS confirmed this instability and provided the following daily total:

- 88 mm at Tabora on 1 February
- 30 mm at Mtwara on 12 February
- 38 mm at Kisumu on 17 February

In lowland areas, daily maximum temperatures were often about 25°C in coastal areas and between 30 and 37°C in interior areas.

#### Breeding conditions

NOAA/AVHRR composited imagery for 21-29 February showed that the only areas providing favourable breeding conditions were in the Akbanazuf dunes north-west of Massawa, the coastal plains of northern Somalia around Mait, between Durdureh and Bosaso and Tug Herbit inland from Alula.

#### Locusts

#### SUDAN

Adults at densities of 720-1800 per hectare were found over an area of 595 hectares in the Tokar delta. Solitary hoppers at 1-4 per plant hole over an area of 370 hectares were found in the southern sector of the Red Sea.

No locusts were reported from elsewhere in the Region.

## NEAR EAST

## Meteorology

The Tihama of Saudi Arabia was under the influence of the Red Sea Convergence Zone. Aden reported rain on 1 February associated with clouds detected by Meteosat. Several sandstorms were observed in northern and southern parts of the peninsula. In the north GTS data confirmed light rains, detected by Meteosat, in particular on 7, 9, 12 and 13 February while some drops were reported at Sharjah on 1 February and Kuwait reported 1 mm on 25 February, and Bahrein 2 mm on 28 February. In late February and early March several residual fronts coming from the eastern Mediterranean gave reise to light-moderate rain in western Arabia; Bisha recorded 1 mm on 29 February, Sulaiyil recorded 6 mm on 3 March, Turaif 2 mm, Badana 3 mm on 4 March and Abha 5 MM on 5 and 6 March.

After a dry spell from 7 to 12 March, Meteosat imagery showed further rain-bearing cloud systems. Turaif recorded 2 mm, Rafha traces on 14 March, 3 mm at Dubai on 15 March and 1 mm at Hail on 16 March. Widespread thermoconvective instability then developed over most of Arabia extending to Kuwait and resulted in rains of varying intensities. Khassab recorded 7 mm on 18 March. Hofuf recorded 14 mm, Doha 15 mm and Riyadh 20 mm on 20 March.

Maximum daily temperatures were frequently about 20°C in the north, while in the centre and south they often fluctuated around 30°C.

## Breeding conditions

NOAA/AVHRR composited imagery for 21-29 February showed that coastal areas of western and southern Arabia were unfavourable for breeding. Irrigated areas in wadi Dawasir, El Kharj and the Qassim were however favourable. The widespread rains of mid-March will create favourable breeding conditions over much of northern and eastern Arabia.

#### Locusts

PEOPLE'S DEMOCRATIC REPUBLIC OF YEMEN

Small numbers of adults persisted in wadi Fajrah (1259N/4418E).

KINGDOM OF SAUDI ARABIA

Small numbers of adults were seen east of Jizan.

The UNITED ARAB EMIRATES were reported clear. There were no other reports from the Region.

## SOUTH-WEST ASIA

## Meteorology

Data from the extreme eastern edge of Meteosat imagery, confirmed by some images from the Indian satellite INSAT, showed the position of cloud masses which affect the winter-spring breeding areas. These lay between the continental anticyclone centred near the Caspian Sea and the low pressure area over southern India. A north-easterly airstream gave several falls of rains in northern Pakistan and Afghanistan. Under the influence of a westerly disturbance there was fairly widespread rain in northern Rajasthan and adjacent areas of Pakistan on 19-20 February, Lahore recording 21 mm, Hissar 15 mm and Jaisalmer 3 mm. In central India, rains from the south and east reached Aurangabad on 1 February where 11 mm were recorded. On 7 February Akola recorded 31 mm, on 13 February Bombay received 12 mm and Pune 29 mm.

In Pakistan maximum daily temperatures were frequently between 20 and 25°C, while in India they were generally between 25 and 30°C.

## Breeding conditions

No NOAA/AVHRR imagery is available but conditions are almost certainly favourable for breeding in coastal areas and inland valleys in Baluchistan of Pakistan and in Seistan-Baluchistan of south-east Iran.

## Locusts

#### PAKISTAN

In February, small numbers of adults were seen at 6 localities in Uthal, 9 localities in Pasni and 17 localities in Turbat districts, the maximum density being 600 per square kilometre at Chakuli (2523N/6302E) on 13 and 27 February and at Gurrani (2521N/6329E) on 26 February.

In the first fortnight of March there were further sightings of small numbers of adults in Baluchistan, the maximum density being 600 per square kilometre at Chakuli and Girdan (2615N/6245E).

## INDIA

One locust was seen at Mandao (2717N/7108E) in Jaisalmer district on 24 February.

There were no reports from AFGHANISTAN or IRAN.

## FORECAST FOR APRIL - MAY 1984

Due to the failure of the winter rains, spring breeding in coastal and sub-coastal areas around the Red Sea and Gulf of Aden will be very localised and only small numbers of adults will be produced. Spring breeding is likely to be widespread in Baluchistan of Pakistan and may occur in south-east Iran. The situation in West Africa and North-West Africa will remain calm.

In <u>South-West Asia</u> spring breeding will occur in coastal and subcoastal areas and inlan valleys of Baluchistan in Pakistan and perhaps also in south-eastern Iran, and groups of hoppers may form in some restricted localities. Fledging will commence towards the end of the forecast period. Increasing numbers of adults will be found in the summer breeding areas.

In the <u>Near East</u> only very localised breeding is possible in western and southern coastal areas of the Arabian peninsula. Small-scale breeding may occur in the United Arab Emirates and northern Oman following the recent widespread rains. There is no possibility that countries to the north of the Arabian peninsula will be reached by adults.

In Eastern Africa numbers of adults will decline on the Red Sea coast of Sudan and small numbers of adults will move towards the interior of Sudan. Small numbers of adults are likely to be present in northern coastal areas of Somalia and there may be restricted small-scale breeding in areas which have received winter-spring rains.

In North-West Africa small-scale low density breeding may occur in wadis draining Saharan uplands.

In <u>West Africa</u> small numbers of adults are likely to persist in restricted areas supporting green vegetation.

Rome, 21 March 1984

