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## Locusts, other migratory pests and emergency operations group

# DESERT LOCUST SITUATION SUMMARY AND FORECAST

No. 67 MARCH - EARLY APRIL 1984

### SUMMARY

The overall situation remained calm. Considerable numbers of adults were present in the South Eastern Desert of Egypt and are likely to be breeding. There were widespread scattered adults in Baluchistan in Pakistan and small numbers of adults in Saudi Arabia and the People's Democratic Republic of Yemen. The situation in West and North-West Africa is calm.

DESERT LOCUST SITUATION, MARCH - EARLY APRIL 1984

WEST AFRICA

Meteorology

During the first decade of March the ITCZ was not very active and its median position fluctuated around 10°N. In the second decade some locally heavy thundery rain was recorded in coastal areas bordering the Gulf of Guinea. According to ASECNA at Abidjan the following rains were recorded: 39 mm on 11 March at Korhogo, 68 mm on 12 March at Man, 92 mm and 57 mm on 13 and 15 March respectively at Tabou, 35 mm on 15 March at Atakpame and 57 mm on 16 March at Abidjan.

From 16 March thundery rains of the order of several millimetres were recorded frequently towards the southern part of the Sahel and during the third decade there were further thunderstorms, Ouagadougou recording 27 mm on 21 March. Meteosat imagery confirmed this thundery weather. Numerous sandstorms were reported in Mauritania and Mali.

Daily maximum temperatures were frequently in the region of 40°C or more.

Breeding conditions

According to NOAA/AVHRR composited imagery for the period 11-20 March, conditions were unfavourable for breeding throughout the Recession Area in West Africa.

Locusts

LIBYA was reported clear in the second half of February and March.

No other reports were received.

NORTH-WEST AFRICA

Meteorology

The influence of Atlantic disturbances on the Maghreb was very variable. According to GTS data, 20 mm of rain fell at Bejaia on 5 March, 10 mm at Jendouba on 6 March, 47 mm at Marrakesh on 7 March, 7 mm at Hon on 8 March, 14 mm at Benina on 9 March, 21 mm at Shahat on 10 March, 25 mm at Gariat-el-Shargia on 13 March, while during this period light rain was recorded between In Salah and Tamanrasset. On 15 March Rabat-Sale recorded 13 mm, on 20 March Essaouira received 20 mm and on 22 March Beni Menal recorded 28 mm during a thunderstorm.

Strong winds resulted in numerous sandstorms in the Algerian Sahara and Libya.

Maximum temperatures inevitably were very variable during this unstable period: most frequently they varied between 25° and 30° C in the Sahara, while in coastal areas they fluctuated between 15° and 25° C.

Breeding conditions

According to NOAA/AVHRR imagery for 11-20 March conditions were favourable for breeding in Kufra oasis but less so in the western oases in Libya. They were unfavourable throughout the Recession Area in Algeria.

Locusts

No locusts were reported.

EASTERN AFRICA

Meteorology

GTS data for the Sudan continued to be fragmentary but Meteosat imagery confirmed that the weather was very dry and hot with maximum temperatures frequently in the neighbourhood of 40°C and even higher. The Red Sea Convergence Zone generally lay between 15° and 20°N. Some thunderstorms were reported in Ethiopia. According to GTS data Gore received 14 mm and Combolohia 31 mm on 21 March. Meteosat imagery showed very dry weather in Djibouti and Somalia; in the latter maximum temperatures exceeded 38° C. In Kenya, Uganda and Tanzania thunderstorms were accompanied by rains which, according to GTS data were very variable but generally between 15 and 25 mm.

Breeding conditions

According to NOAA/AVHRR imagery for 11-20 March the only coastal areas providing favourable breeding conditions were the Akbanazuf dunes north-west of Massawa and between Durdureh and Bosaso in northern Somalia. According to the Sudan locust report for February heavy rain fell around Jebel Halibai and conditions were favourable for breeding.

Locusts

No locusts were reported during March and up to 20 April.

SUDAN

According to the Sudan locust report for February the solitary hoppers at 1-4 per plant hole were in the late instars and were present in the Tokar delta. At Jebel Gedeif (1750N/3810E) adults were found at densities of 180 per hectare over 1200 hectares, and at Jebel Halibai copulating adults were found at densities of 240-540 per hectare over an area of 4.500 hectares.

NEAR EAST

Meteorology

As reported in Summary No. 66 (February-early March 1984) the most significant fact was the contrast between the first fortnight, when the weather was generally dry, and the second fortnight when there was widespread rain in many western, northern, central and eastern parts of the Arabian peninsula.

Bahrein recorded 16 and 10 mm on 19 and 20 March respectively, Kuwait recorded 3 mm on 21 March, Riyadh 20 mm and Hofuf 14 mm on 20 March. Very strong thermoconvective instability gave rise to violent thunderstorms and frequent sandstorms until 22 March. Unfortunately it has not been able to obtain rainfall data for other stations but heavy rain was reported at Tabuk, Haqil, Hail, Wadi Sirhan, Jawf, Riyadh, Dawadmi, Ar'ar, Qaisumah, Hofuf, Taif, Asir and Hijaz mountains. There was no rain on the Tihama. There were light-moderate rains in the Hadhramut and around Beihan in mid-March. Rain in the Yemen Arab Republic led to a flood in Wadi Tuban in late March.

In mid April there was further rain in Riyadh, Hail, Asir, Taif, Mecca and Jeddah.

During March maximum temperatures in central and southern Arabia frequently reached 35° C. Egypt experienced similar weather to Libya; according to the GTS Sollum received 9 mm on 10 March, Minya received 8 mm on 16 March. Some sandstorms accompanied strong winds associated with Mediterranean depressions originating in the Atlantic. Maximum temperatures ranged from about 23°C along the Mediterranean to 33°C in the interior.

#### Breeding conditions

Conditions are not favourable for breeding in coastal areas of western and northern Arabia, in eastern Arabia and are only favourable in oases in the interior of the peninsula.

In Egypt conditions are suitable for breeding in the South-Eastern Desert as a result of heavy rains in January and February.

#### Locusts

##### KINGDOM OF SAUDI ARABIA

A few solitary adults were reported east of Jizan.

##### YEMEN ARAB REPUBLIC

Most of the Tihama was surveyed by ground teams but no locusts were found.

##### PEOPLE'S DEMOCRATIC REPUBLIC OF YEMEN

Low density adults were observed in Jebel Rusaykhah (1301N/4430E) on 19 March. Some day-flying adults were seen in Khormaksar on 26 March.

##### EGYPT

Considerable numbers of solitaricolor hoppers of various instars were found in Wadis Hamradome (2246N/3535E) and Serintai (2204N/3626E), Yoder and Aideb adjacent to Jebel Elba (2215N/3622E). Large numbers of fledgling and immature solitary adults were found in wadis Hamradome and Yoder at densities of 4.000-6.000 per square kilometre.

OMAN was reported clear in February.

There were no other reports from the Region.

### SOUTH-WEST ASIA

#### Meteorology

The main features of the general atmospheric circulation were the persistence of the continental anticyclone which extended from the Caspian Sea to China (pressure generally between 1025 and 1035 mb) and the development of small low pressure areas between southern India and Bangladesh (pressure about 1005 mb). As a result, thundery rains of thermoconvective origin were recorded: 13 mm on 1 March at Quetta, 30 mm on 16 March at Dal Bandin and 165 mm on 18 March at Quetta (it has not been possible to check this figure as there is no control rainfall group in the SYNOP code). According to the Department of Plant Protection Locust Situation Bulletin moderate rainfall was recorded at Pasni and light rain was recorded at Turbat on 15 March, there was widespread heavy rain in Kharan, Pasni and Nushki areas during the third week of March and light to moderate rains in Uthal, Khuzdar, Panjgur and Quetta areas during the second half of March. In India light rain was reported in north Rajasthan during the second half of March. Maximum temperatures in Rajasthan reached 37°C in the first half of March and 42°C in the second half.

#### Breeding conditions

According to NOAA/AVHRR imagery for 11-20 March there had been no appreciable development of vegetation up till then but considerable vegetation cover will have developed following the heavy rains of the third week in March.

#### Locusts

##### PAKISTAN

During the first half of March adults were found at 42 localities in Uthal, Turbat, Pasni, Panjgur, Khuzdar, Kharan and Nushki districts at a maximum density of 600 per square kilometre at Girdan (2615N/6245E) and Nurbur (2529N/6302E). In the second half of March scattered adults were found throughout the winter-spring breeding area, the maximum density being 3,000 per square kilometre at Rumra (2512N/6344E) in Gwadar district.

##### INDIA

Seven adults were observed at Agnao (2805N/7231E) in Bikaner district on 8 March but no other locusts were seen during the month.

AFGHANISTAN was clear in March. There was no report from IRAN.

FORECAST FOR MAY-JUNE 1984

The forecast period is characteristically one of major redistribution as adults leave the winter-spring breeding areas and migrate to the summer breeding areas. There have been heavy rains in the South-Eastern Desert of Egypt and in western Pakistan and considerable numbers of adults will move into the interior of Sudan and into the summer breeding areas of India and adjacent areas of Pakistan.

In South-West Asia spring breeding in coastal areas and inland valleys of Baluchistan in Pakistan and possibly in south-eastern Iran is likely to terminate. New generation adults will migrate to the summer breeding areas of Rajasthan in India and to the Cholistan, Nara and Tharparkar deserts of Pakistan.

In the Near East the situation will be generally calm in Arabia. Small numbers of adults are likely to be present on western and southern coastal areas of the Arabian peninsula and in some interior areas with green vegetation. In the South-Eastern Desert of Egypt breeding, which may result in the formation of some hopper groups, will terminate.

In Eastern Africa considerable numbers of adults will reach the interior of Sudan from the winter-spring breeding areas along the Red Sea. Small numbers of adults are likely to persist in northern coastal areas of Somalia.

In North-West Africa small scale low density breeding may occur in wadis draining Saharan uplands and in Libyan areas. Adults produced in the former area will move south.

In West Africa small numbers of adults will occur in restricted areas of green vegetation. Breeding may commence in areas which receive pre-monsoon rains.

Rome, 25 April 1984

It is regretted that for technical reasons no map accompanies this summary.

# Desert Locust Situation Summary No. 67 MARCH/MARS 1984

