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



## ORGANIZACION DE LAS NACIONES UNIDAS PARA LA AGRICULTURA Y LA ALIMENTACION

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# DESERT LOCUST SITUATION SUMMARY AND FORECAST

No. 28 DECEMBER 1980

SUMMARY

The most important populations were in West and North-West Africa. Hopper bands and fledglings were present in Mauritania and Mali; there was a widespread population of adults in Algeria and an increasing number of adults in southern Morocco. There were groups of adults and small hopper bands on the Red Sea coast of Sudan. Small numbers of adults were also reported from Niger, Somalia, Egypt, Saudi Arabia and the People's Democratic Republic of Yemen.

# DESERT LOCUST SITUATION - DECEMBER 1980

# NORTH-WEST AFRICA

#### ALGERIA

There have been no recent detailed reports on the desert locust situation. In mid-December it was reported that there was a widespread dispersed population south of the Atlas mountains.

#### MOROCCO

Increasing numbers of adults were reported in southern Morocco but no swarms or groups of adults were seen.

No reports were received from TUNISIA or LIBYA.

# WEST AFRICA

#### MAURITANIA

Light rain fell in the Bounaga area (1907N/1310W) on 15 December. The second decade was characterised by strong winds and violent dust storms extending from 12°W to the Atlantic coast. The winds were generally from the east or north-east.

Annual vegetation was drying out between 18° and 20°N except in some areas of the Aftouts de Faye (1838N/1300W), Barouiya El Beida (1907N/1410W) and north-west of Tidjikja.

Intensive ground surveys were undertaken during the month. On 2 December mature adults which had already laid were found at a density of 50-60 per hectare over 3 hectares at 1850N/1400W and on the same evening 16 maturing females were captured at light some 15 kilometres to the south. Most individuals had 6 eyestripes. On 3 December fifth instar hopper bands mixed with fledglings were found over an area of 250 hectares at 1828N/1330W, on 4 December second to fifth instar bands were found over 12 ha at 1820N/1300W, on 5 December fifth instar bands and fledglings were found over 20 ha at 1820N/1340W and on 6 December 1 hectare of fledglings were found at 1822N/1359W. In the second decade of December droppings from previously settled swarms were found at four localities east of Adjoujt and one east of Tidjikja. Scattered mature adults and hoppers were found at one locality. On 20 December first to fifth instar hoppers and two mature females were seen south of Atar. Adults were also reported from the Affole massif (1638-1703N/1043-1052W) from 22-27 December. They were mainly immature, although one mature female was captured, and were generally at low density.

The following reports were also received from nomads or guides: Swarms arrived in the Aftouts de Faye on 10 October. By 15 October there was widespread copulating and laying and conditions were very favourable for breeding. Two swarms were reported to have been seen at Tichtaya, one during the second decade of October, the second on 28 November. There were numerous hoppers in the area 1934-1942N/1315-1327W. A cultivator reported the presence of a swarmlet at Grarat El Vras (1948N/1342E) at the end of November.

MALI

No rain was recorded.

Patches of green vegetation continued to exist in Tamesna, the Adrar des Iforas and Timetrine and the soil was moist at a depth of 10-15 cm.

The most important populations were in northern Fimetrine, where groups of hoppers completed their development at densities of 50-100 per square metre. Colours: green, green and black and yellow and black. During the first decade there were hoppers of all instars, although the majority were in the fifth instar, mixed with fledglings at densities of 50 000 - 200 000 per hectare. Subsequently densities were distinctly reduced due to the departure of adults and to the control measures undertaken in the area 1922-2006N, 0005-0009E. A total of 1 590 hectares were treated with 500 litres of 5% dieldrin and 300 litres of femitrothion 1000.

In central and north-eastern Adrar des Iforas the density of fledglings had declined to 250 - 500 per hectare by the end of the month due to emigration to the north and north-west.

An area of 435 hectares of fledglings was treated with 120 litres of fenitrothion 1000 at Tessealt (1955N/0221E).

During a survey from Tin Essako to the border of Niger only one infestation was found, at Tagorast (1755N/0235E) where adults were found at densities of 50 - 250 per hectare over an area of 250 hectares.

# NIGER

Ecological conditions continued to be favourable for survival and there were still areas of very green Schouwia, Fagonia, Colocynthis and Aerva, but Boerhavia and Tribulus were drying out and overgrazed. Densities of adults were very low, less than 1 per hectare.

There were no reports from CHAD or CAMEROON.

# EASTERN AFRICA

SUDAN

In late reports for November it was recorded that groups of mature and immature adults were present in 9 blocks of the Tokar delta over a total area of 1910 hectares at densities of 4320-9180 per hectare. Groups of hoppers were also present in 11 blocks over a total area of 2 420 hectares. At the beginning of the month most hoppers were in the first to third instars and further hatching occurred late in the month. 37 480 kg of EHC bait and 220 kg EHC dust were used in control operations. Tokar received 47.2 mm of rain compared with the monthly average of 24.8 mm; for Port Sudan corresponding figures were 1.1 and 23.8.

In December mature adults were present at densities of up to 12 000 per hectare and hopper bands at densities of 6-8 per hectare over a total area of 8 140 hectares, in the Tokar delta. In the northern sector hopper bands were found over an area of 800 hectares. Control operations were in progress.

#### SOMALIA

Extensive aerial and ground surveys recorded abundant green vegetation in coastal and subcoastal areas of northern Somalia.

A total of six adults were observed between Berbera and Heis (1054N/4655E).

No locusts were reported from DJIBOUTI, ETHIOPIA, KENYA, TANZANIA or UGANDA.

## NEAR EAST

## KINGDOM OF SAUDI ARABIA

Widespread rain was reported from northern and central areas associated with the passage of Mediterranean depressions. There was also heavy rain on the southern Tihama associated with the Red Sea Convergence Zone, and the area is suitable for breeding.

Small numbers of adults were found at four localities on the Qunfidah Tihama, the highest density being 150 per hectare in wadi Shia (1850N/4127E).

Isolated adults were also reported from two localities in near Um Lejj.

#### YEMEN ARAB REPUBLIC

The area between wadis Nawr and Habl, which received rain in the second half of November, was favourable for breeding. No locusts were seen during a ground survey north and south of Hodeidah undertaken during the second half of December.

PEOPLE'S DEMOCRATIC REPUBLIC OF YEMEN

Two adults were seen in the Khor Umeirah area west of Aden.

EGYPT

Heavy rain fell over the eastern and south-eastern deserts on 27 December and caused many wadis to flood. Conditions are very favourable for breeding in the south-eastern desert.

Small numbers of solitariform adults were seen in three wadis in the Abraq area, and three adults were seen in the Shalatein area.

KUWAIT was reported clear. No reports were received from other countries of the region.

#### SOUTH-WEST ASIA

INDIA was reported clear. No reports have been received from AFCHANISTAN, IRAN or PAKISTAN.

# FORECAST FOR FEBRUARY-MARCH 1981

As temperatures rise, spring breeding is likely to begin in Algeria, Morocco, Western Sahara and Mauritania. Breeding will continue in coastal and subcoastal areas around the Red Sea and the Gulf of Aden and is likely to start in coastal areas of southern Iran and the Mekran of Pakistan.

In <u>West Africa</u> there is likely to be a generally northward movement by adults in Mauritania and some are likely to reach western Sahara and southern Morocco. These are likely to mature as they encounter favourable breeding conditions so that breeding will be more widespread than in late 1980. There may be further breeding in areas of north-east Mali and north-west Niger which received rain in mid-November. Displacement by adults is likely to be restricted to periods of warm southerly winds.

In North-West Africa breeding is likely to commence in southern Morocco and over extensive areas of Algeria south of the Atlas mountains. There may be further immigration by adults from the south and these could include a few small swarms from Mauritania and groups from Mali.

In <u>Eastern Africa</u> breeding will continue in the Tokar delta of Sudan, and in the northern sector of the Red Sea coast and is likely to be in progress on the northern Red Sea coast of Ethiopia and the south—eastern desert of Egypt. It may be on a scale sufficient to produce some hopper bands and perhaps some small swarms. There is likely to be small—scale breeding on the coastal and subcoastal plains of Somalia.

In the Near East limited breeding will occur on the Red Sea coastal plains of Saudi Arabia and the Yemen Arab Republic. Northward movement of adults along the Tihama will occur and some may reach interior areas. There may be some small—scale breeding in the People's Democratic Republic of Yemen, the Sultanate of Oman and the United Arab Emirates, in areas providing favourable ecological conditions.

In <u>South-West Asia</u> small-scale breeding is likely to occur in coastal areas of southern Iran and the Mekran of Pakistan. Small numbers of adults are likely to reach inland valleys and plains in Baluchistan.

Rome 23 January 1981

