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DESERT LOCUST SITUATION SUMMARY AND FORECAST

No. 51 NOVEMBER - EARLY DECEMBER 1982

SUMMARY

There were further reports of swarms on the borders of the Rub al Khali in Saudi Arabia and of groups of adults in the highlands of the Yemen Arab Republic during November. These did not reach the coastal areas along the Red Sea and Gulf of Aden as anticipated and there were only small numbers of adults on the coastal plains. Groups of adults were, however, reported from southern Red Sea coastal areas in Sudan in November and breeding commenced.

According to a late report there was a high density infestation of hoppers and adults in south-east Iran in September which was partly controlled. There were scattered locusts reported in India, the United Arab Emirates and the People's Democratic Republic of Yemen.

W/Q1113

DESERT LOCUST SITUATION, NOVEMBER-EARLY DECEMBER 1982

WEST AFRICA

Meteorology

During November the Intertropical Convergence Zone (ITCZ) progressively approached the Gulf of Guinea, passing from 12°N to 7°N. Thunderstorms were essentially localized to the south of this zone up to 7 December, while numerous sandstorms were reported to the north of the zone. Starting on 8 December some thundery showers were observed in central Mali. Maximum daily temperatures frequently exceeded 37°C at the beginning of November in the dry region to the north of the ITCZ. To the south, in the humid zone, maximum temperatures were about 30°C.

Breeding conditions

No NOAA/AVHRR imagery is available for November. According to ground reports in October vegetation was well developed in the Bouressa basin in the northern Adrar des Iforas of Mali, Tamesna and around Agades in Niger.

Locusts

No reports of locusts have been received.

NORTH-WEST AFRICA

Meteorology

Torrential rains at the beginning of November which mainly affected Tunisia were reported in the previous summary. From 7 November a family of Atlantic disturbances influenced all Maghreb countries from Morocco to Libya. The Azores anticyclone led to relatively dry weather during the second half of November but the end of the month was characterized by a northerly airstream accompanied by showers. At the beginning of December further Mediterranean disturbances affected Libya and southern Tunisia. From 10 December the influence of Atlantic disturbances was very strong except over Morocco which continued to be affected by the Azores anticyclone. Maximum temperatures frequently reached 25°C at the beginning of November but fell to no more than 15°C at the beginning of December in northern Algeria and Tunisia. There were moderate rains in southern Algeria on 8-9 December, Tamanrasset recording 37mm on 8 December.

Breeding conditions

No NOAA/AVHRR imagery is available for November.

Locusts

There were no reports of locusts.

EASTERN AFRICA

Meteorology

Large irregularities in GTS data prevented thorough analysis of pressure fields and the precise positioning of disturbances. Nevertheless, there was evidence of very active storms in Kenya, Tanzania, Ethiopia and Somalia. Daily rainfall amounts of 40-70mm were frequently recorded in the areas affected by the thundery showers. This very unstable weather explains the important variations in the maximum temperatures: during the bright periods maximum temperatures were often about 33°C but during the showers they dropped to 23°C. On the Red Sea coast of Sudan heavy rain fell on 15-18 November from Mohamed Gul southwards.

Breeding conditions

NOAA/AVHRR vegetation index imagery for eastern Ethiopia and Eritrea for late October showed that in localized areas there had been a good vegetation response from the rains which affected large parts of Eastern Africa and the Near East earlier in the month. Excellent breeding conditions were observed in the Massawa-Akbanazuf area and wadi Anseba. Most of the coastal plains and wadis of Eritrea were, however, observed to be dry. The Tokar Delta in Sudan was partly green at this time. Localized green areas were observed in the Danakil Depression, notably at 1435N/4015E, 1415N/4110E, 1350N/4135E, 1255N/4020E, 1340N/4140E and 1255N/4310E.

Locusts

SUDAN

Groups of mature adults were found in three blocks in the Tokar Delta over a total area of 360 hectares at densities of 800-1280 per hectare and at Jebel Gedif and Khor Balatat over 420 hectares at densities of 480-2400 per hectare in early November.

By 1-10 December there were second and third instar hoppers at densities of 2-5/plant over 2160 hectares in the Tokar delta. Along Khor Baraka scattered adults were found at densities of 120-150 per hectare over 2400 hectares. Further south-east near the Ethiopian border 15 220 hectares were infested with solitarious adults at densities of 180-720 per hectare.

SOMALIA

According to a late report a total of 21 solitarious adults were seen between Silil and Bulhar and 35 solitarious adults were seen between Berbera, Las Dureh and El Darad (1043N/4534E) on a ground survey during the period 24 September - 6 October.

There were no other reports from the region.

NEAR EAST

Meteorology

A complex low pressure area was present on most days during November and the first half of December over western Arabia and was frequently accompanied by a thundery trough over the central or southern Red Sea. There were heavy rains on the Tihama of the Yemen Arab Republic on 7-9 November and further rain on the Yemen Tihama on 10 December. There was frequent thundery rain over eastern and north-eastern Arabia. In the United Arab Emirates the maximum station total for November was 113.0mm at Hamraniyah. There were light rains in Yemen PDR on 3 and 25 November. Sandstorms were observed from time to time.

Breeding conditions

The NOAA/AVHRR vegetation index imagery for the Red Sea coast and interior areas of Saudi Arabia, Yemen AR and Yemen PDR acquired during late October confirmed good breeding conditions in some areas in the three countries, following the widespread and heavy rains during the second decade of October. Vegetation response to these rains was very significant when compared to the imagery of early October.

The Tihama in Saudi Arabia remained generally dry north of 17°30'N except for an area around Tuffail (2045N/3942E) and Mudhailif (1933N/4102E). Between Al Birk and the Yemen AR border localized green areas were observed close to the mountains, i.e. an indication of limited flooding.

In the interior of Saudi Arabia substantial green areas were observed in Wadi Dawasir west of Sulaiyil, Wadi Habawnah, north-east of Najran. The area west and northwest of Najran was observed to have widespread low density green vegetation cover.

The AVHRR imagery indicates that the Yemen AR received very substantial rains during October. The Tihama between Al Luhayyah and Zabid showed large areas with good vegetation cover which is, however, restricted to the wadis, notably between 1410N and 1430N major flooding seems to have occurred. In the interior of the country a large number of scattered green areas were observed between 1430N-1645N and 4340E - 4430E, especially Wadi Al Jawf had major vegetation development between 4350E and 4435E. Also Wadi Al Kharid was green locally between 4410E and 4430E. A single green area was observed in Wadi Khabb at 4440E.

In Yemen PDR the coastal plains were generally dry except for Wadi Tuban and Wadi Bana which were very green as a result of likely significant flooding. Another green area was observed on the coastal plain at 1335N/4600E.

The interior of the country was observed to have widespread low density vegetation cover between 1340N/1410E and 4450E-4625E.

Locusts

YEMEN ARAB REPUBLIC

According to a late report the swarm seen flying over Marib on 25 October was immature and was one square kilometre in size; on 28 October an immature swarm flew over Harib and on 31 October an immature swarm settled east of El Bayda (1358N/4534E) and flew off south-east.

Between 4 and 8 November there were reports of groups of adults in the highlands at Bani Heshesh (1525N/4430E), Rada (1425N/4451E) and Dhamar (1433N/4424E) but these were not confirmed. However, a specimen of a gregarious female found at Sana'a in late November indicates that some locusts reached the highlands. At the end of November the situation was reported to be quiet.

KINGDOM OF SAUDI ARABIA

Further information has been received about the report of hoppers and adults seen on 6 November in the Abu Shaddad area. According to a Saudi Locust Officer who visited the Sharawrah and Najran areas several people reported seeing swarms in the Sharawrah area (1730N/4710E) between 27 October and 1 November and the swarm at Najran was seen on about 21 October. No traces of adults or hoppers, however, could be found when the locust officer visited the areas in mid-November.

Further reports of flying swarms, egg laying and hoppers were reported from about 150 km south of Sulaiyil on 24 November but no gregarious locusts could be found during an aerial survey of the area in late November. A few solitary adults were found in cultivations in Wadi Dawasir.

Elsewhere small numbers of mature adults were present near Nudhailif north of Qunfidah during November and laying was observed. According to a late report for September-October small numbers of adults were seen at Sabiya.

PEOPLE'S DEMOCRATIC REPUBLIC OF YEMEN

Ground surveys located the presence of solitary adults in Wadi Thallan (1319N/4537E) on 21 November, in Wadi Emi Riga (1301N/4435E) and Wadi Dhar (1244N/4425E) on 27 and 29 November at densities of 33-42 per hectare.

UNITED ARAB EMIRATES

In the course of ground surveys in the northern Emirates and the central agricultural areas a total of 11 solitary adults were seen in November.

No locusts were reported from IRAQ. No other reports were received from other countries in the region.

SOUTH-WEST ASIA

Meteorology

The monsoon is still present over India because weak low pressure centres remain in this area. Nevertheless, the continental high pressure is developing gradually by means of ridges which lessen the instability.

The influence of the sea is well-marked from Sri Lanka to the Arabian Sea. Several tropical cyclones developed near the west coast of India. A particularly severe one crossed the coast of Gujarat on 8 November between Varaval and Diu and resulted in rainfall values of 30-100mm in southern Rajasthan. The summer breeding area, however, remained dry.

Maximum temperatures were often about 35°C at the beginning of November and mainly between 25° and 30°C at the beginning of December.

Locusts

PAKISTAN

No gregarious locust activity was reported in the first half of November.

INDIA

Scattered immature or maturing adults were found in 28 localities in Jaisalmer district at densities ranging from 15-3000 per square kilometre, at four localities in Barmer district at densities ranging from 125-450 per square kilometre at six localities in Bikaner district at densities ranging from 15-600 per square kilometre and at four localities in Ganganagar district at densities ranging from 75-125 per square kilometre during the first half of November. No locusts were reported in the second half of November.

There were no other reports from the region for November.

According to the Indian Locust Bulletin for 1-15 November, IRAN reported that in late September 600 hectares were infested with yellow adult locusts and hoppers in the Zarabad area (2535N/5921E) west of Chahbahar in Sistan and Baluchistan province. Control operations were undertaken over an area of 200 hectares. As desert locusts have not previously been reported breeding in this area at that time of the year further information and confirmation has been requested.

FORECAST FOR JANUARY - FEBRUARY 1983

The swarms reported in the interior of Arabia in late October and November did not reach the Red Sea and Gulf of Aden coasts as anticipated and are now more likely to breed in the interior of Arabia. First generation hoppers on the Red Sea coasts of Sudan and Ethiopia will start to fledge in early January and may be on a scale sufficient to produce swarmlets in areas where no control is possible. A second generation may start in February. Breeding by considerable numbers of adults may start in south-east Iran if the report of desert locusts in late September is confirmed. Small scale breeding is likely to occur in the Tihama of Saudi Arabia, Yemen AD, the coastal areas of Yemen PDR and in the Mehran of Pakistan.

In West Africa small numbers of adults will persist in Mauritania, Mali and Niger in areas of green vegetation.

In North-West Africa small numbers of adults may persist in central and western Algeria.

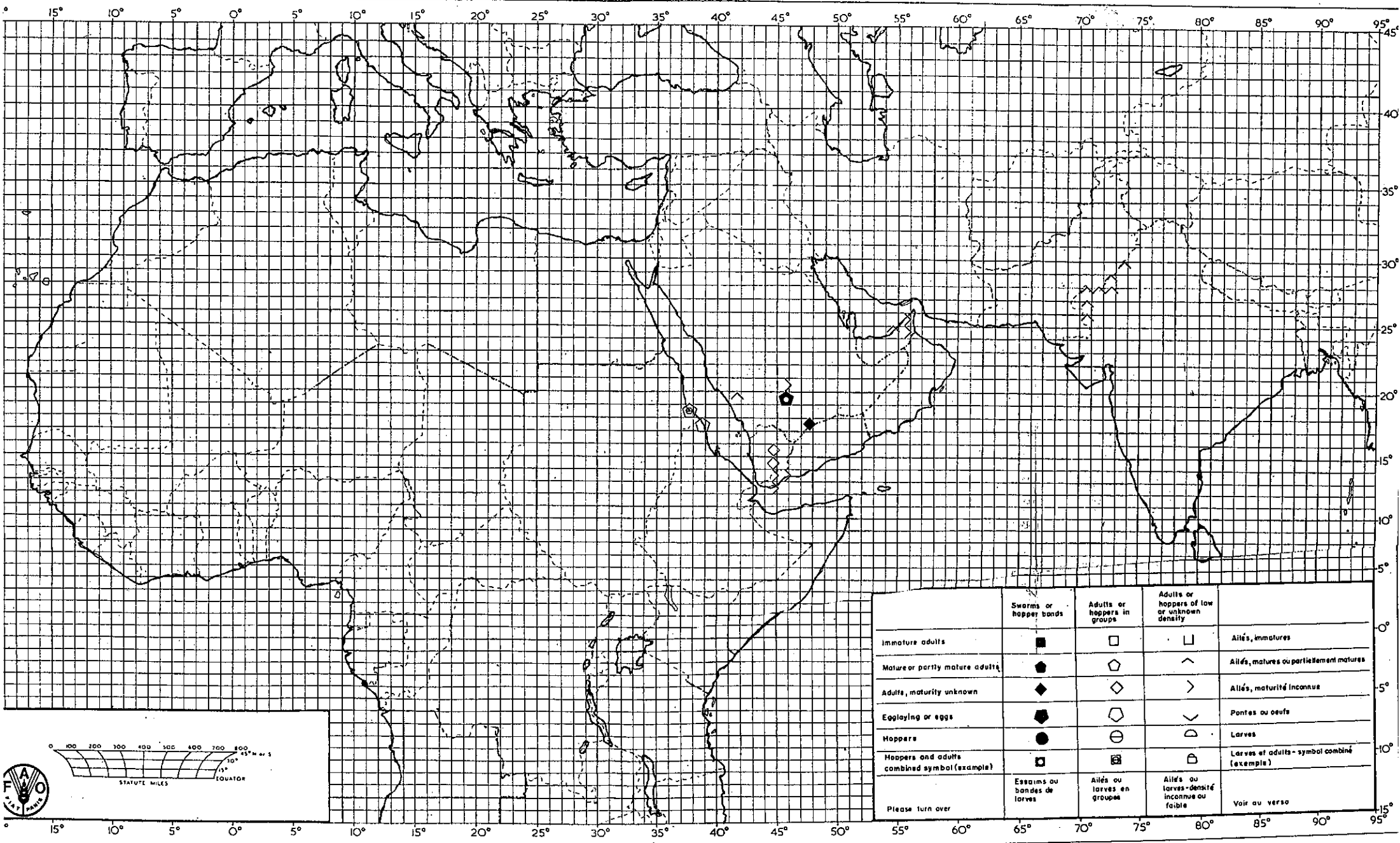
In Eastern Africa first generation fledglings will appear from early January on the Red Seas coasts of Sudan and Ethiopia in areas where there has been adequate rainfall or runoff. These may be on a scale sufficient to form groups or even swarmlets in areas where no control is possible. If there is further rainfall these adults will mature, lay and give rise to a second generation of hoppers towards the end of the forecast period. In north-west Somalia and Djibouti initially low density breeding is likely to occur in areas on the coastal plains which have received rain.

In the Near East the swarms reported in the interior of Saudi Arabia and the adults seen in the highlands and interior of the Yemen AR in November failed to reach the Tihama or the Gulf of Aden of Yemen PDR and may start to breed in the interior of Arabia in wadis or in areas which receive rainfall. Localised breeding will occur in the Tihamas of Saudi Arabia and Yemen AR and in coastal areas of Yemen PDR. Small scale breeding is likely to begin in the United Arab Emirates and in some coastal and interior areas in Oman.


In South-West Asia small numbers of adults will persist in the summer breeding areas of Pakistan and north-west India. Others will occur in the Maleran of Baluchistan in Pakistan and may start to breed towards the end of the forecast period. If the report of desert locusts in Iran in September is confirmed there could be considerable numbers of adults in south-eastern Iran and they are likely to start to breed before the end of the forecast period.

Rome
17 December 1982

Desert Locust Situation Summary No. 51 NOVEMBER - EARLY DECEMBER / NOVEMBRE - DÉBUT DE DÉCEMBRE



	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



0 100 200 300 400 500 600 700 800
STATUTE MILES EQUATOR