



# FAO



## EMERGENCY CENTRE FOR LOCUST OPERATIONS

### DESERT LOCUST BULLETIN No. 175



During March, there was a migration of mature swarms from the Red Sea area towards the central northern interior of Saudi Arabia where they laid in areas of recent rainfall. Small infestations of swarms and hopper bands continued in areas of previous infestations along the coastal plains on both sides of the Red Sea where control operations were in progress. Elsewhere, a few adults appeared in southern Israel and scattered adults continued to be present and breeding on the coastal plains of Yemen near Aden.

No significant rains were reported during the month in the Red Sea area and vegetation is drying out in some areas. Infestations along the coastal plains will continue to decrease during the forecast period as conditions become unfavourable. Those populations that persist will become concentrated in remaining green vegetation where they are expected to continue to breed and perhaps form a few small groups and swarmlets during the forecast period.

In northern and central Arabian Peninsula, a few groups and small swarms may continue to appear from the west and breed in areas of recent rainfall. By the end of the forecast period, numbers will probably start to decrease as adults begin to move towards summer breeding areas of North-Eastern Africa and South-West Asia.

Isolated adults were reported from a few locations in the Central Sahara of Algeria.

No locust activity was reported in West Africa or in the winter-spring breeding areas of Pakistan and India.

The FAO Desert Locust Bulletin is issued monthly, supplemented by Updates during periods of increased Desert Locust activity, and is distributed by telefax, telex, FAO pouch, or mail by the Locust, Other Migratory Pests, and Emergency Operations Group, AGP, FAO, 00100 Rome, Italy.

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## WEATHER AND ECOLOGICAL CONDITIONS

Based on field reports, METEOSAT and ARTEMIS satellite imagery, and Météo-France synoptic and rain data. Rainfall terms: light = less than 20 mm of rain; moderate = 20 - 50 mm; heavy = more than 50 mm.

During March, no significant rainfall occurred along the coastal plains on both sides of the Red Sea except for a few light showers during the first week on the southern coast of Sudan and northern coast of Eritrea. Although it appears that seasonal rains are coming to an end and vegetation is starting to dry out, many areas are still favourable for breeding and are expected to remain so for another month.

Several eastward moving depressions occurred over the Mediterranean during the month. The first formed over the central Mediterranean on 1 March and caused light rains to fall along the northern coast of Africa. As it moved further east during the next few days, strong warm south-westerly winds occurred over the northern Red Sea and southerly winds were present over the Arabian Peninsula until the 8th. A second depression formed over the eastern Mediterranean in mid month where it remained from the 17th to the 20th. This resulted in similar winds over the Red Sea and Arabian Peninsula as well as light to moderate rainfall in central Saudi Arabia during the last two weeks of the month. For example, Hail reported 33 mm on the 20th and 29 mm on the 31st, Gassim 43 mm and Uqlat As Suqur 55 mm on the 20th.

Another depression moved east from the western Mediterranean during 25-28 March and produced light to moderate rains along the northern coast from Morocco to western Egypt. In Algeria and Tunisia, rains extended south of the Atlas; for example in Tunisia, Gafsa received 19 mm and Tozeur 18 mm on the 26th. However, conditions in these areas are reported to be dry and unfavourable for breeding.

In the Persian Gulf, strong north-westerly and westerly winds, associated with a depression, were present on 19-25 March, and some areas reported light rainfall. Light rain also fell on the eastern coast of Oman from Sohar to Sur on the 28th. Breeding conditions are expected to be favourable in coastal areas between Kuwait and Oman as a result of rainfall during the past two months.

In North-West Africa, a depression was present off the south-western coast of Morocco on 16-18 March, resulting in light rains falling in the extreme south-west of Morocco and in northern Mauritania from Atar to Bir Moghreïn. In West Africa, no significant rainfall was reported and the ITCZ was located well to the south of the Sahel.

Light rainfall occurred during the first half of the month in Pakistan and western India. For example, in Baluchistan of Pakistan, Khuzdar reported 15 mm on 2-3 March and in the Cholistan Desert, Bahawalapur received 18 mm from the 9th to 14th. In Rajasthan of India, Ganganagar received 19 mm during the first half of the month. However, conditions are expected to be dry and generally unfavourable for breeding in most areas.



## AREA TREATED IN MARCH 1993

Egypt	no details available
Ethiopia	1,700 ha (5-14 March)
Saudi Arabia	no details available
Sudan	no details available
Yemen	no details available



## WEST AFRICA

### MAURITANIA

No locust activity was reported from 20 January to 28 February.

**No locust information had been received from other countries in the region up to 31 March.**

## NORTH-WEST AFRICA

### ALGERIA

A few isolated adults, some of them showing pink coloration, were observed in the Central Sahara at one location south of Tinrhert Plateau and six locations in Adrar Ahnet, from 25 February to 7 March.

### LIBYA

No locust activity was reported during February and March.

### MOROCCO and TUNISIA

No locust activity was reported during February.

## EASTERN AFRICA

### SUDAN

No new information was received for March.

### ETHIOPIA

There was an unconfirmed report of a swarm at Kuhasin about 100 km south of Asmara on 27 February.

During the first half of March, a 4 sq. km immature swarm was treated in the Alghena area at Wadi Rehieb (1725N/3835E) on the 5th. In the same area, 3rd-5th instar hopper infestations were found at two other locations, each within about 500 ha on the 8th; however, only one represented a suitable target for control. Low density immature adults, each within about 500 ha, were controlled at two places near Massawa on the 14th.

There were also unconfirmed reports of high locust infestations in the Western Lowlands on the 4th; however, these are probably Tree Locust or Migratory Locust.

### DJIBOUTI, KENYA, TANZANIA and UGANDA

No locust activity was reported during February and March.

### SOMALIA

The situation remains unclear. There was an unconfirmed report that infestations along the northern coastal plains in December may have been more widespread than originally suggested and could now extend between Zeila (1121N/4329E) and Las Khoreh (1110N/4813E) where a few swarms have been reported in March.

## NEAR EAST

### SAUDI ARABIA

Several small mature swarms and groups of mature adults moved from the Red Sea coastal plains towards Medinah and the central interior south-west of Hail near Houlifa (2715N/4110E) from 6-31 March. Although control operations were immediately undertaken in all areas, some laying occurred and hopper infestations appeared late in the month which were treated. Low numbers of adults were reported near Gassim at Al-Fawwarah (2602N/4242E).

On the Red Sea coast, control operations continued during the entire month mainly against 5th instar hoppers and immature adults in previously infested areas of the southern Tihama near Al-Qunfudah, Tafil, Lith, Jizan and on the eastern side of the Asir mountains near Al Baha (2030N/4130E). No new incoming swarms were reported in these places up to 31 March. On the northern Tihama, low numbers of adults were present at Duba (2725N/3535E).

No locusts were seen during surveys at the end of the month near Gassim, Riyadh and Tabuk, and in the eastern region.

#### **YEMEN**

Scattered mature adults, some of them copulating, and hoppers of all instars were reported from the coastal plains west of Aden in the Al Waht area (1258N/4443E) within 1 ha, and east of Aden in the Hasala area (1315N/4527E) on 20 March. Few surveys were undertaken on the Tihama during the month and further details are awaited.

#### **ISRAEL**

In early March, a few solitarious adults reached the Arava Valley north of Eilat near Sammar (2950N/3501E).

#### **EGYPT**

Maturing swarms were reported at four locations within a total area of 65 sq. km on the southern Red Sea coast near Halaib (2214N/3638E) on 17-27 February.

No new information was received for March.

#### **JORDAN**

No locusts were seen during surveys carried out south of the Dead Sea along Wadi Araba from Es Safi (3102N/3528E) to Aqaba and in the Mudawarah area (2920N/3600E) on 18-20 March.

#### **KUWAIT**

No locust activity was reported during February.

**No locust information had been received from other countries in the region up to 31 March.**

#### **SOUTH-WEST ASIA**

##### **PAKISTAN**

No locust activity was reported during the second half of February and the first half of March.

##### **INDIA**

In addition to adults previously reported during the second half of February (Bulletin 174), scattered adults were also seen at three other locations in Bikaner and one location in Jodhpur districts. One 5th instar hopper was also reported at Bikampur (2745N/7209E) of Bikaner on the 25th.

No locust activity was reported during the first half of March.

**No locust information had been received from other countries in the region up to 31 March.**



#### **WEST AFRICA**

##### **MAURITANIA**

Isolated adults are likely to be present and may be breeding in a few locations of Tiris Zemmour and northern Adrar where recent rains occurred.

## **MALI**

Isolated adults may be present in Adrar des Iforas and Tamesna.

## **NIGER**

Scattered adults are likely to be present in some areas of northern and central Tamesna and in Air.

## **CHAD**

Isolated adults may be present in northern Tibesti.

## **BURKINA FASO, CAMEROON, GAMBIA, GUINEA BISSAU, GUINEA CONAKRY and SENEGAL**

No significant developments are likely.

## **NORTH-WEST AFRICA**

### **MOROCCO**

Isolated adults may be present in the extreme south and breeding in areas of recent rains.

### **ALGERIA**

Isolated adults will persist in the Central Sahara near Tinrhert Plateau and in the Adrar Ahnet region and lay if rainfall occurs during the forecast period. As a result of seasonal movement, a few adults may move towards the southern region late in the forecast period.

### **TUNISIA**

Isolated adults may be present and breeding in areas of recent rains near Gafsa and Tozeur.

### **LIBYA**

Isolated adults may be present and breeding in areas of recent rains in Al-Hammada-Al-Hamra.

## **EASTERN AFRICA**

### **SUDAN**

Small infestations of adults and hoppers will persist on the Red Sea coastal plains near Suakin, Port Sudan and Aitarba and become concentrated in remaining green vegetation where they are expected to continue to breed during the forecast period. By the end of the forecast period, overall locust numbers will decrease in coastal areas as migration towards the summer breeding areas commences, and small numbers of adults may appear in the Kassala area.

### **ETHIOPIA**

Small infestations of adults and hoppers will persist on the Red Sea coastal plains of Eritrea between the Sudanese border and Massawa, and continue to breed in those areas where vegetation remains green. Smaller infestations may also be present at places along the coastal plains from Massawa to Djibouti. By the end of the forecast period, overall locust numbers will decrease in coastal areas as migration towards the summer breeding areas commences, and small numbers of adults may appear in western areas.

### **DJIBOUTI**

Small numbers of adults may be present and breeding in some wadis of the northern coastal plains.

### **SOMALIA**

If the swarms reported on the north-western coastal plains are confirmed, moderate scale breeding may have occurred over a widespread area of the northern coastal plains and may continue in areas of recent rainfall.

### **KENYA, TANZANIA and UGANDA**

No significant developments are likely.

## NEAR EAST

### **SAUDI ARABIA**

Infestations on the southern Tihama will continue to decrease during the forecast period as conditions become unfavourable. A few groups and small swarms may continue to move into the northern central region from the south-west and breed in areas of recent rainfall. However, by the end of the forecast period, numbers will probably start to decrease in the interior as adults begin to move towards summer breeding areas.

### **YEMEN**

Small infestations will persist on the Tihama, becoming concentrated in remaining green vegetation where they are expected to continue to breed and perhaps form a few small groups and swarms during the forecast period as vegetation becomes dry. Small scale breeding is likely to occur in areas of green vegetation on the coastal plains west and east of Aden.

### **EGYPT**

A few small groups or swarms may form as adults become concentrated in the remaining green vegetation along the coastal plains near the Sudanese border. However, locust numbers are expected to decrease during the forecast period as conditions become unfavourable and adults begin to move towards summer breeding areas.

### **UAE**

Small numbers of adults, and perhaps a few groups or small swarms, are likely to appear from the west and lay in areas of recent rains near Ras Al Khaymah and Fujayrah.

### **OMAN**

Small numbers of adults, and perhaps a few groups or small swarms, may appear from the west and lay in areas of recent rains on the Musandam Peninsula and Batinah coast.

### **KUWAIT, BAHRAIN and QATAR**

Some number of adults, and perhaps a few groups or small swarms, may appear and lay in areas of recent rains.

### **ISRAEL**

Isolated adults are expected to persist in the Arava valley and some others may appear in the extreme south during the forecast period; however, no significant developments are expected.

### **JORDAN**

Small numbers of adults may appear in the south and breed if rainfall occurs.

### **IRAQ**

Small numbers of adults may appear in the south and breed if rainfall occurs.

### **LEBANON, SYRIA and TURKEY**

No significant developments are likely during the forecast period.

## SOUTH-WEST ASIA

### **IRAN**

Small scale breeding may have occurred in areas of recent rains on the south-eastern coast. Small numbers of adults, and perhaps a few groups or small swarms, may appear from the west and lay in areas of recent rains.

**PAKISTAN**

Small numbers of adults may be present and breeding on the Makran and interior areas of Baluchistan, and may be augmented by others appearing from the west. By the end of the forecast period, adults may start to move east towards summer breeding areas.

**INDIA**

Isolated adults may be present in Rajasthan.

**AFGHANISTAN**

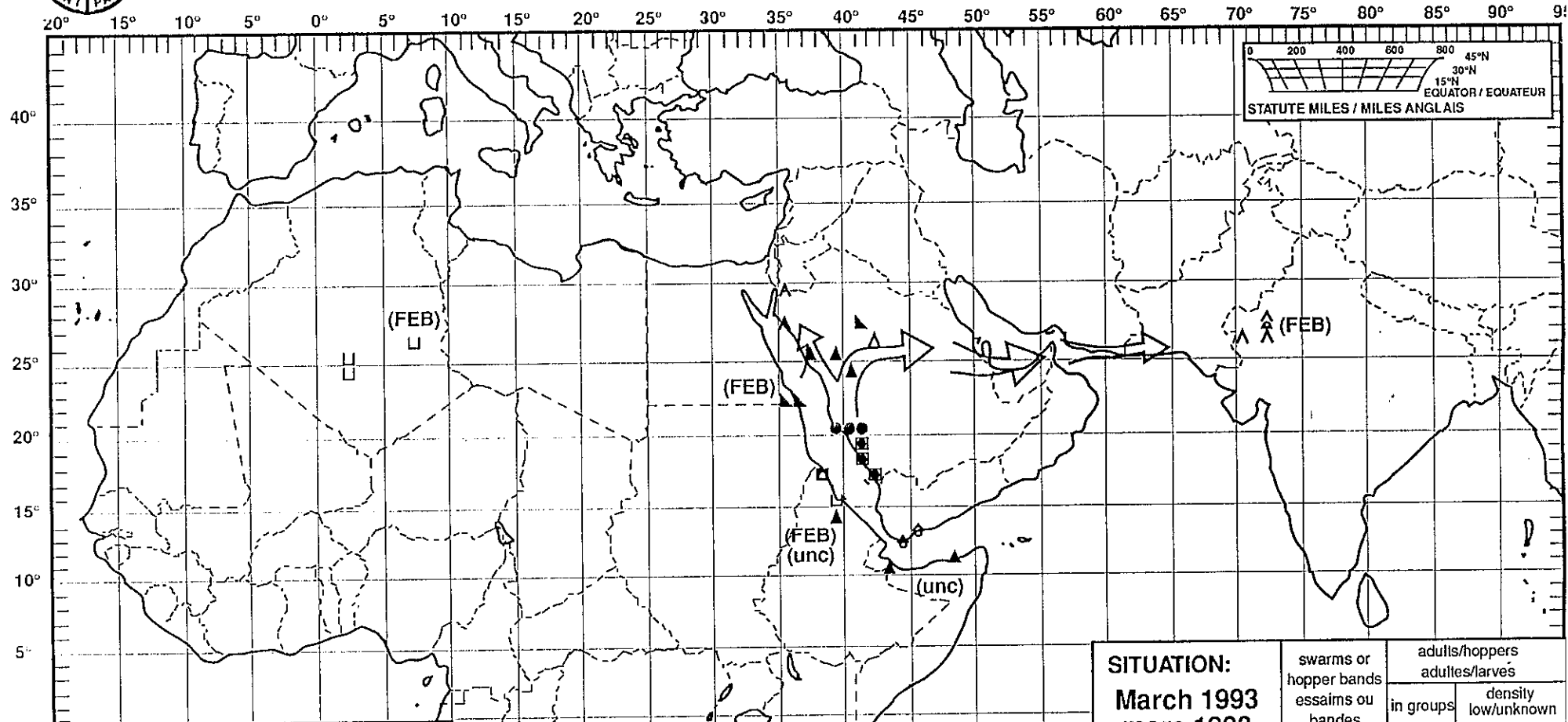
No significant developments are likely during the forecast period.

1 April 1993



# Desert Locust: summary Criquet pèlerin: situation résumée

## No. 175



FORECAST TO: PREVISION AU: 15.5.93	LIKELY PROBABLE	POSSIBLE POSSIBLE
current undetected breeding reproduction en cours et non détectée		
major swarm(s) essaim(s) important(s)		
minor swarm(s) essaim(s) limité(s)		
non swarming adults adultes non essaimant		

**SITUATION:  
March 1993  
mars 1993**

	swarms or hopper bands essaims ou bandes larvaires	adults/hoppers adultes/larves	
		in groups en groupes	density low/unknown densité faible/inconnue
immature adults adultes immatures	■	□	◻
mature or partly mature adults adultes matures ou partiellement matures	▲	△	◤
adults, maturity unknown adultes, maturité inconnue	▲	△	^
egg laying or eggs pontes ou œufs	▼	▽	∇
hoppers larves	■	○	◐
hoppers & adults (combined symbol example) larves et adultes (exemple symboles combinés)	◼	◼	◻