



# FAO



## EMERGENCY CENTRE FOR LOCUST OPERATIONS

### DESERT LOCUST BULLETIN No. 211



#### GENERAL SITUATION DURING MARCH 1996 FORECAST UNTIL MID-MAY 1996

The Desert Locust situation continued to improve during March in affected countries. The only significant infestations remaining are two areas of hopper bands, one in the extreme south-west of Morocco and the second in northern Mauritania. Both infestations are confined to a relatively limited area but there may be additional small infestations that are undetected. Ground control operations undertaken in both countries treated a total of 1,000 ha. New adults have started to appear and some of these may move north during the forecast period into areas south of the Atlas Mountains in Morocco and Algeria that received above average rainfall in March. However, the scale of any movement will be considerably less than last year.

A few solitary adults were present on the Red Sea coastal plains of Saudi Arabia and Eritrea and in northern Somalia. No locusts were reported on the coastal plains of Yemen and Sudan. No significant developments are expected in the Red Sea area as conditions are now dry in most areas. No locusts were reported in the spring breeding areas of the interior of the Arabian Peninsula, although conditions are expected to improve as a result of unusually heavy rains during March in south-western Saudi Arabia and the interior of Yemen. Above average rains also fell in coastal areas along the Persian Gulf and Gulf of Oman. However there were no reports of locusts in the area that could take advantage of such rainfall.

In South-West Asia, scattered adults persisted in western Pakistan where breeding is expected to be in progress. A similar situation may exist in south-eastern Iran.

The FAO Desert Locust Bulletin is issued monthly, supplemented by Updates during periods of increased Desert Locust activity, and is distributed by fax, e-mail, FAO pouch and airmail by the Locust, Other Migratory Pests and Emergency Operations Group, AGP Division, FAO, 00100 Rome, Italy. It is also available on the Internet.

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## WEATHER & ECOLOGICAL CONDITIONS DURING MARCH 1995

Based on field reports, METEOSAT and NOAA 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, several areas in North-West Africa and the Arabian Peninsula received heavy and above average rainfall. Some of these rains were associated with numerous eastward-moving depressions over the Mediterranean and Persian Gulf.

In North-West Africa, unusually heavy rains fell along the coast of Morocco and in several areas south of the Atlas Mountains in Algeria and southern Tunisia. In most places, up to two to four times the long-term average for this time of year was received. For example, rains fell between Agadir and Tan-Tan in Morocco. Sidi Ifni reported 44 mm and Tan-Tan 32 mm during March. In Algeria, rains fell south of the Atlas Mountains from Bechar to the Tunisian border. Bechar reported 44 mm and El Golea 26 mm. Light to moderate rains fell in the southern Sahara at Tamanrasset, Illizi and Djanet. In Tunisia, light to moderate rains fell in the south; Remada reported 23 mm. As a result of these rains, breeding conditions will improve in the above areas during the forecast period.

In West Africa, localized green vegetation was reported in parts of Tiris Zemmour in northern Mauritania. Green vegetation was also present near Ouadane, Chinguetti and Oujft in western Adrar and in the depressions of the Aftouts south of Akjoujt. In the Region, the ITCZ was located well south of the Desert Locust area at 10°N.

Dry conditions prevailed on the coastal plains along both sides of the Red Sea and Gulf of Aden. No significant rainfall was reported from these areas except for some light showers along the southern coastal plains of Saudi Arabia at Jizan.

Unusual and widespread rains fell in the interior desert of the south-western Arabian Peninsula several times during the month. For example, Wadi Dawasir in Saudi Arabia reported a total of 70 mm which is nearly four times the monthly average and Sharurah in the Empty Quarter received 28 mm. More than 150 mm was reported nearby from Wadi Najran but this could not be confirmed. These rains are believed to have extended into the interior of Yemen from Wadi Jawf to Wadi Hadhramaut and Ramlat Sabatayn. Above normal heavy rains fell in coastal areas of the Persian Gulf in UAE and along the northern coast of Oman several times during the month. For example, Dubai reported a total of 125 mm, Ras Al-Khaimah 149 mm and Sharjah 107 mm in UAE and in Oman Sohar received 123 mm. Conditions are probably already favourable for breeding in some of these areas while in others they are expected to improve in the coming weeks.

In South-West Asia, light rains fell throughout coastal and interior areas of Baluchistan in Pakistan where conditions are expected to be improving for breeding in several places.



## AREA TREATED

Mauritania	280 ha	(1-15 March)
Morocco	800 ha	(1-15 March)



## DESERT LOCUST SITUATION

Please see the last section of this Bulletin for a definition of terms used in reporting the current locust situation.

### WEST AFRICA

#### MAURITANIA

During the first half of March, a few small and low density bands of late instar hoppers mixed with immature adults were reported at two locations south of Atar (2010/1312W and 1922N/1259W). Ground treatments including farmer control covered 280 ha. There were also a few patches of first to second instar hoppers near the border with the southern Morocco (2109N/1406W). Elsewhere, survey teams found scattered solitary adults and late instar hoppers at several locations in western Adrar and south-western Tiris Zemmour. There were reports from nomads stating that no locusts were seen in the Aftout Fay area (ca. 1830N/1430W) south of Akjoujt.

**No locust information was received from other countries in the Region up to 31 March.**

### NORTH-WEST AFRICA

#### MOROCCO

During the second half of February, three additional small adult groups, covering a few tens of hectares and at densities ranging from 10 to 50 per sq. m., were reported copulating and laying in the extreme south-west (ca. 2214N/1404W) on the 17th and the 23rd. By the end of the month, low density hatching (30-40 hoppers per sq. m.) was observed nearby over a total of 12 ha at two locations west of Tichla (2135N/1458W) on the 28th. Further north, there was an additional report of isolated adults south of the Atlas Mountains in the Errachidia Province at Tismoumine (3035N/0509W).

During the first half of March, infestations of second to fourth instar hoppers, primarily third and at densities ranging from 30 to 100 per sq. m., were reported at four locations near Tichla. A total of 800 ha were treated.

**No locust information was received from other countries in the Region up to 31 March.**

### EASTERN AFRICA

#### SUDAN

A late report indicated that no locusts were found during surveys in cropping areas of the Tokar Delta (1817-1823N/3739-3752E) on 13 February.

#### ERITREA

A late report indicated that scattered immature adults were present on the Hadarit plain (1714N/3847E) of the northern Red Sea coast during February.

#### SOMALIA

A late report indicated that a few isolated adults were seen on the northern coast at Wagderia (1105N/4476E) and Harshu (1108N/4728E) during February. Scattered mature adults were reported nearby in the interior only at Hadaftimo (1045N/4802E) and Dulalas (1048N/4711E) during a survey covering 18 locations on 25 February - 3 March.

**No locust information was received from other countries in the Region up to 31 March.**

### NEAR EAST

#### SAUDI ARABIA

During March, scattered solitarious adults, at densities ranging from 10 to 20 per hectare, were reported over a total of 100 hectares on the coastal plains near Lith (2009N/4016E) and a few isolated adults (2-5 per sq. km) were seen near Qunfidah (1908N/4105E) within 1,000 ha.

**YEMEN**

No locusts were reported from the northern Tihama near the Saudi border and in the interior including Wadi Jawf (1608N/4441E) and Marib (1529N/4519E) on 1-13 March.

**KUWAIT**

A late report indicated that no locusts were present in the Al-Wafra (2834N/4804E) and Al-Abdaly (3005N/4742E) areas during February.

**No locust information was received from other countries in the Region up to 31 March.**

**SOUTH-WEST ASIA****PAKISTAN**

A late report indicated that during the first half of February, scattered adults were present in a total of ten locations along the coast and adjacent areas of the interior in the Lasbela, Turbat and Pasni districts, with a maximum of 8 adults seen at Sardasht (2531N/6318E) near Pasni on the 10th.

During the second half of February, scattered adults were reported from some locations on the coastal areas of the Makran and Lasbela, with a maximum of eight adults seen at Nakti (2537N/6611E). During the first half of March, similar infestations were reported with a maximum of 9 adults near Shooli (2533N/6213E) on the 9th.

**INDIA**

During the second half of February, two adults were seen at Dhanana (2642N/7011E) and one at Sam (2650N/7030E) in Jaisalmer district of Rajasthan.

No locusts were reported during the first half of March.

**No locust information was received from other countries in the Region up to 31 March.**



Forecasting terms used in this section to indicate the chances of a particular event happening are indicated below; every term is arranged within each category from most to least probable:

high probability	will, probably, almost certain, likely, expected
medium probability	may, might
low probability	possibly, perhaps, unlikely

**WEST AFRICA****MAURITANIA**

Current hopper infestations in the north will continue to mature with new adults forming throughout the forecast period. As a result, low numbers of adults may move further north into Tiris-Zemmour while others are expected to persist in western Adrar and adjacent areas that remain green.

**MALI**

Isolated locusts may be present in a few places of the Adrar des Iforas.

**NIGER**

Isolated locusts may be present in a few places of Tamesna.

**BURKINA FASO, CAMEROON, CAPE VERDE, CHAD, GAMBIA, GUINEA BISSAU, GUINEA CONAKRY and SENEGAL**

No significant developments are likely.

## NORTH-WEST AFRICA

### ALGERIA

Low numbers of adults are likely to appear during the forecast period in the western and central Sahara, particularly in those areas which have received recent rains. These may lay eggs shortly after arrival and hoppers could start hatching during the second half of the forecast period.

### MOROCCO

Adults and perhaps a few small groups or swarms are likely to appear during the forecast south of the Atlas Mountains, particularly in Oued Draa and in areas which have received recent rains. These are expected to lay eggs shortly after arrival and low numbers of hoppers could start hatching during the second half of the forecast period. However, this movement and any subsequent breeding will be on a much smaller scale than last year.

### LIBYA and TUNISIA

No significant developments are likely.

## EASTERN AFRICA

### SOMALIA

Scattered adults are expected to persist at a few places along the north-western coastal plains and adjacent areas of the interior. These may breed if rainfall occurs during the forecast period.

### ERITREA, ETHIOPIA, KENYA, SUDAN, TANZANIA and UGANDA

No significant developments are likely.

## NEAR EAST

### SAUDI ARABIA

Low numbers of adults that escaped survey and control operations may have moved into the interior, especially those areas that received recent rains such as Wadis Dawasir and Najran. If so, breeding is likely to occur on a small scale. A few adults may persist on the central Red Sea coastal plains.

### YEMEN

Low numbers of adults may be present and breeding in areas of recent rains in the interior desert between Wadis Jawf and Hadhramaut and in Ramlat Sabatayn. If so, hoppers are expected to appear during the forecast period. A few isolated adults may be present at places along the coastal plains of the Red Sea and Gulf of Aden.

### OMAN

Scattered adults may be present and breeding along the northern Batinah coast in areas of recent rains.

### UAE

Scattered adults may be present and breeding in areas of recent rains from Ras Al Khaimah to Fujayrah.

### BAHRAIN, EGYPT, IRAQ, ISRAEL, JORDAN, KUWAIT, QATAR, SYRIA and TURKEY

No significant developments are likely.

## SOUTH-WEST ASIA

### IRAN

Scattered adults may be present at a few places along the south-eastern coastal plains from Jask to Gawatar. If so, low numbers of hoppers will appear during the forecast period.

**PAKISTAN**

Low numbers of adults will persist in coastal and interior areas of Baluchistan. Breeding is likely to be in progress and will continue on a small scale in areas of recent rainfall.

**INDIA**

A few isolated adults are likely to be present and will persist in parts of Rajasthan.

**AFGHANISTAN**

No significant developments are likely.



The dates of the 21st session of the Executive Committee of the Commission for Controlling Desert Locust in the Central Region and the 21st Session of the Commission has been changed to 21-28 May 1996. The meeting will still be held in Cairo.

issued: 1 April 1996



## GLOSSARY OF TERMS

The following special terms are used in the Desert Locust Bulletin when reporting locusts:

### Non-gregarious adults and hoppers

isolated	very few present and no mutual reaction occurring; 0 - 1 adult per 400 m foot transect (or less than 25 per ha). Other terms: a few.	
scattered	enough present for mutual reaction to be possible but no ground or basking groups seen; 1 - 20 adults per 400 m foot transect (or 25 - 500 per ha). other terms: some, low numbers.	
group	forming ground or basking groups; more than 20 adults per 400 m foot transect (or more than 500 per ha).	

### Adult swarm and hopper band sizes

very small	swarm: less than 1 sq. km	band: 1 - 25 sq. m.
small	swarm: 1 - 10 sq. km	band: 25 - 2,500 sq. m.
medium	swarm: 10 - 100 sq. km	band: 2,500 sq. m - 10 ha
large	swarm: 100 - 500 sq. km	band: 10 - 50 ha
very large	swarm: more than 500 sq. km	band: more than 50 ha

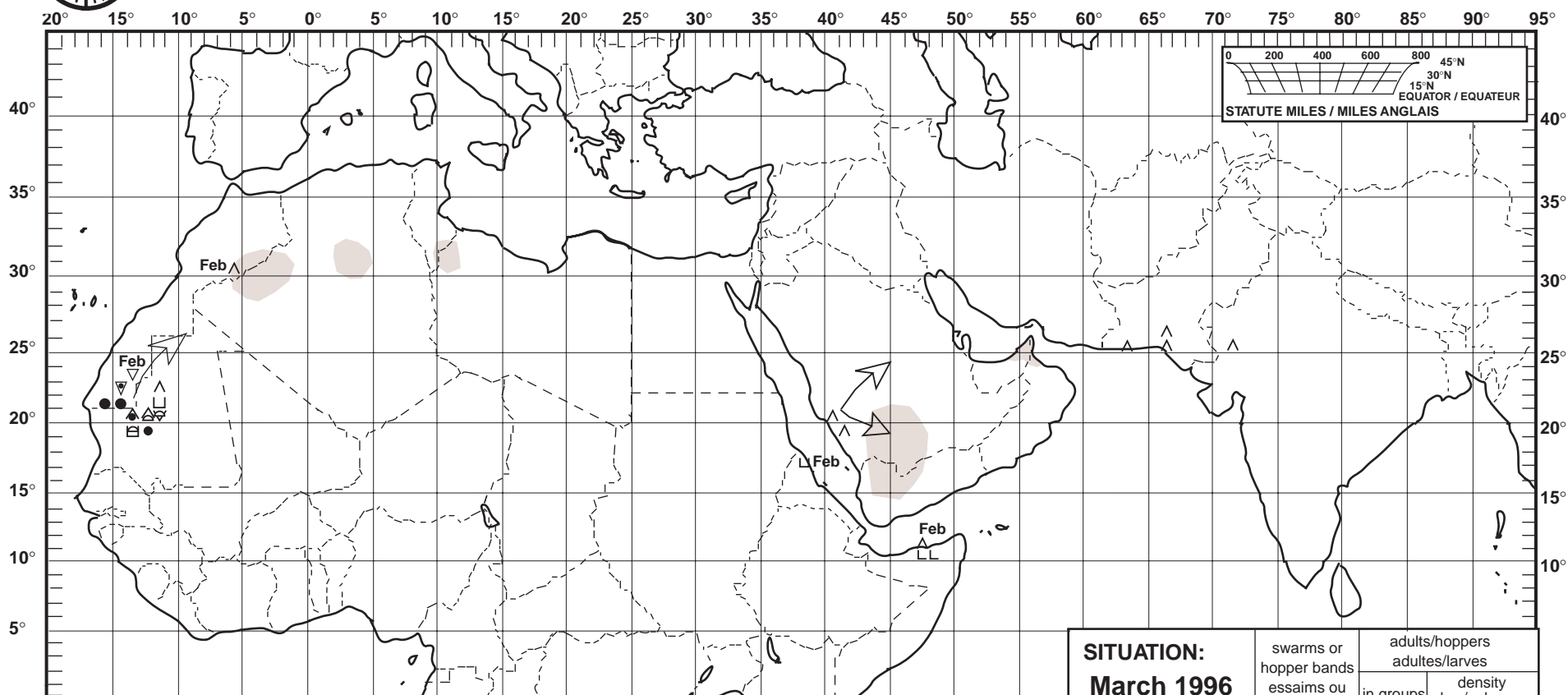
### Other reporting terms

breeding	the process of reproduction from copulation to fledging.
summer	rains and breeding: July - September/October
winter	rains and breeding: October - January/February
spring	rains and breeding: February - June/July
decline	a period characterised by breeding failure and/or successful control leading to the dissociation of swarming populations and the onset of recessions; can be regional or major.
outbreak	a marked increase in locust numbers due to concentration, multiplication and gregarisation which, unless checked, can lead to the formation of hopper bands and swarms.
plague	a period of one or more years of widespread and heavy infestations, the majority of which occur as bands or swarms. A major plague exists when two or more regions are affected simultaneously.
recession	period without widespread and heavy infestations by swarms.
remission	period of deep recession marked by the complete absence of gregarious populations.
upsurge	a period following a recession marked initially by a very large increase in locust numbers and contemporaneous outbreaks followed by the production of two or more successive seasons of transient-to-gregarious breeding in complimentary seasonal breeding areas in the same or neighbouring Desert Locust regions.



# Desert Locust: summary Criquet pèlerin: situation résumée

## No. 211



FORECAST TO: PREVISION AU:	LIKELY PROBABLE	POSSIBLE POSSIBLE
<b>15.05.96</b>		
favourable breeding conditions conditions favorables à la reproduction		
major swarm(s) essaim(s) important(s)		
minor swarm(s) essaim(s) limité(s)		
non swarming adults adultes non essaimant		

SITUATION: March 1996 mars 1996	adults/hoppers adultes/larves		
	swarms or hopper bands essaims ou bandes larvaires	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)			

