

# FAO



## EMERGENCY CENTRE FOR LOCUST OPERATIONS

### DESERT LOCUST BULLETIN No. 189



The Desert Locust situation continues to be of concern in Mauritania, Morocco and Algeria where spring breeding was in progress during May resulting in the formation of small swarms by the end of the month. As no further rains have fallen and conditions are drying up in most areas, breeding is expected to come to an end and those swarms that escape control will move south towards the summer breeding areas of the Sahel of West Africa. Reports indicate that this movement has already started and during the forecast period, a small number of swarms are expected to arrive in central and southern Mauritania and in northern Mali and north-western Niger. FAO is taking appropriate action to prepare for a control campaign in southern Mauritania; however, control operations may not be possible in northern Mali and Niger due to insecurity.

In South-West Asia, scattered locust adults are present on the coast of Baluchistan in Pakistan. However, these numbers will decrease as adults move towards the traditional summer breeding areas along the Indo-Pakistan border where they will start to lay with the onset of the monsoon rains.

Elsewhere in West Africa, Sudan, along the Red Sea coastal plains and in the Near East, no significant locusts are present.

At this point, current infestations in North-West Africa do not represent a threat to East Africa or the Near East since migrations towards the summer breeding areas will be confined to Mauritania, Mali and Niger.

The FAO Desert Locust Bulletin is issued monthly, supplemented by Updates during periods of increased Desert Locust activity, and is distributed by fax, telex, e-mail, FAO pouch and airmail by the Emergency Centre for Locust Operations, AGP Division, FAO, 00100 Rome, Italy.

**Telephone:** (39-6) 522-52420 or -54578 (7 days/week, 24 hr)

**Facsimile:** (39-6) 522-55271

**E-Mail:** Abderrahmane.Hafraoui@fao.org (via Internet)

**Telex:** 610181 FAO I



## WEATHER & ECOLOGICAL CONDITIONS DURING MAY 1994

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 May, the weather was characterized by several low-level depressions over the central Sahara. Light rains associated with an eastward-moving front occurred on 1 May over a widespread area extending from the Grand Erg Oriental of Algeria to southern Tunisia and central Libya. Light rains associated with a second frontal system fell on the 17th in southern Tunisia at Gafsa. Apart from these two instances, no significant rainfall was reported from North-West Africa. As a result of this and increasing temperatures in most desert areas, breeding conditions were unfavourable in most places except in some wadis along the southern side of the Atlas Mountains in Morocco and Algeria where patches of green vegetation persisted mainly in Wadis Draa, Ghriss and Ziz of Morocco and in the Bechar region, Hamada du Guir and Saoura Valley of Algeria. Annual vegetation was reported to be drying up in southern Morocco and west of the Hoggar Mountains in Algeria. Winds over the central and northern Sahara of Algeria were variable throughout the month.

Although no significant rainfall was associated with the Saharan depressions, these disturbances did influence the Inter-Tropical Convergence Zone (ITCZ) by pulling it northward several times during the month. For example, the ITCZ reached 16°N over eastern Mali at Gao on the 6, 11, 17 and 21 May and up to 18°N over south-eastern Mauritania at Oualata on the 12th, 23rd and 27th-30th. However, seasonal rains have not yet commenced in the traditional summer breeding areas of the Sahel.

In Mauritania, no further rains were reported in the north and conditions are drying out similarly to those in Morocco and Algeria. Winds were predominately from the north during the month. In northern Mali, rains fell in the Tilemsi Valley between Aguelhok and Anefis on 6 May and there was an unconfirmed report of rainfall further west south of Taoudenni.

In Sudan, by the end of May cold clouds associated with the northward-moving seasonal rains had reached as far as En Nahud, El Obeid and Kosti. However, there were no reports of significant rainfall.

Several low-level depressions were present throughout the month over the south-western Arabian Peninsula as well as a few frontal systems in the Red Sea area. This resulted in cold cloud formation during several days in the first two decades along the Red Sea coast from Port Sudan and the entire Eritrean coast to Djibouti and in Yemen along the Red Sea coast and in the interior between Ataq and Jawf as well as in Wadi Najran of Saudi Arabia. Cold cloud formation on a more significant scale occurred nearly everyday during the first two decades over the interior and coastal areas of northern Somalia, but decreased during the last decade. However, no reports of significant rainfall were received from these areas except for Dire Dawa in the Railway area of Ethiopia where light to moderate rains occurred in mid-month. Consequently, conditions are expected to be generally unfavourable for breeding along the Red Sea coasts while those in some areas of northern Somalia could be improving.

In South-West Asia, light rains fell in Rajasthan of India during the first half of May; however, conditions are not expected to be favourable for breeding at this point as there is no indication that the south-westerly monsoon airflow over the Arabian Sea has commenced.



## AREA TREATED IN MAY 1994

Mauritania	no details		16-30 April
	10,858	ha	1-15 May
Morocco	21,738	ha	1-24 May
Algeria	7,255	ha	1-28 May



## DESERT LOCUST SITUATION

### WEST AFRICA

#### MAURITANIA

From 25 April-15 May, patches of 3rd-5th instar hoppers persisted near Zouerate in Tiris Zemmour where several groups of fledglings commenced to appear. Infestations were concentrating in drying vegetation along the southern side of Mount Kediet ej Jill (ca. 2240N/1235W) and north and west towards the Moroccan border. As a result, about 10-15 immature swarms had formed, ranging in size from 1-6 sq. km, some of them were dense, and were seen flying towards the south to south-east. There was also an unconfirmed report of some swarms in the Tagant region; however, further details are awaited. Survey and ground control operations are in progress in the infested areas where a total of 10,858 ha were controlled during the first half of May.

#### MALI

Nomads reported substantial numbers of immature and mature adults on trees in northern Adrar des Iforas near the Algerian border in Oued In Bolrech (ca. 2053N/0108E) on 10 May.

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

### NORTH-WEST AFRICA

#### MOROCCO

During May, an increasing number of locations reported hopper groups and bands, ranging from 4-70 hoppers per sq. m, while there were reports of others hatching primarily south of Errachidia and to a lesser extent south of Tata along Oued Draa near Fom Alguim (2919N/0749W). Those near Errachidia were within a limited area between Ramlia (3042N/0427W), Taouz (3054N/0400W) and Fezzou (3058N/0454W); new generation adults eventually began to appear near Ramlia on 16 May. However, some breeding was probably undetected as hopper bands were reported further north for the first time south of Erfoud (3125N/0414W) from 16 May onwards.

A total of 21,738 ha were treated on 1-24 May.

In the extreme south, there was also an unconfirmed report of 400 ha of hopper bands in early May.

#### ALGERIA

Some groups of mature adults persisted during the first decade of May in the infested areas south of Bechar (3133N/0214W). Patches and bands of all instar hoppers continued to be reported primarily along Oued Daoura near Beni Abes (3007N/0210W), and to lesser extent nearby in Dra el Kelba region (ca. 3005N/0250W) and further south in Erg Atimin (ca. 2900N/0250W) throughout May. Fledglings commenced to appear from the second decade onwards in these areas.

As a result of earlier adult migration, maturing adults were present in southern Algeria. Several new locations west of the Hoggar mountains were found infested where breeding had occurred. A total of 7,225 ha were treated both south of the Atlas Mountains and in the south west of the Hoggar mountains on 1-28 May.

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

### EASTERN AFRICA

#### SUDAN

A late report stated that isolated adults were present on the southern Red Sea coastal plains near Suakin and in Tokar Delta during April; however, no details are available.

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

A late report stated that there was no locust activity up to 30 April.

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

#### NEAR EAST

##### **SAUDI ARABIA**

A late report stated that there was no locust activity during April, and no locusts were reported during May.

##### **KUWAIT**

No locust activity was reported up to 30 April.

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

#### SOUTH-WEST ASIA

##### **PAKISTAN**

During the second half of April, scattered adults up to 3,000 per sq. km, were reported in 26 locations along the coast of Baluchistan from the Iranian border to Uthal district, as well as further in the interior near Nushki at Jhaddal (2811N/6440E) where the higher densities were observed on the 27th. No breeding was reported.

##### **INDIA**

In addition to the situation previously reported during the second half of April (Bulletin no 188), isolated adults were reported in a total of four locations in Jaisalmer, one in Barmer and one in Bikaner districts, at densities of 50-300 per sq.km.

During the first half of May, isolated adults at densities of 250-350 per sq. km were reported in two locations of Jaisalmer district.

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



**FORECAST UNTIL MID-JULY 1994**

#### WEST AFRICA

##### **MAURITANIA**

Locust populations in the north will become concentrated as a result of drying conditions and continue to decline due to control and migration; hence, no significant infestations are expected to remain by the end of the forecast period. Those escaping control operations will form small swarms and move southwards to the summer breeding areas of the centre and south starting early in the forecast period. Once these swarms arrive, they will mature and lay with the onset of the seasonal rains.

##### **MALI**

Several small swarms and high densities of adults are expected to arrive from the north throughout the forecast period in the Adrar des Iforas and lay with the onset of the seasonal rains. The probability of low numbers of adults and a few small swarmlets first appearing in the south-west from the southern circuit and moving north-east towards Gao will decrease during the forecast period; in any case, these populations are not expected to represent a significant threat.

##### **NIGER**

A few isolated adults may be present in Tamesna and several small swarms and adults are expected to appear during the forecast period from the north and lay with the onset of the seasonal rains.

**CHAD**

A few isolated adults may be present in Tibesti; however, no significant developments are expected.

**BURKINA FASO, CAMEROON, GAMBIA, GUINEA BISSAU, GUINEA CONAKRY, SENEGAL and SIERRA LEONE**

No significant developments are likely.

**NORTH-WEST AFRICA****MOROCCO**

Current populations that escape control operations will form small swarms and move south towards the summer breeding areas of the Sahel. The situation is expected to improve during the forecast period as a result of control operations, unfavourable breeding conditions and migration.

**ALGERIA**

Current populations in the north that escape control operations will form small swarms and move south towards the summer breeding areas of the Sahel. The infestations in the south may only produce groups of adults and perhaps a few small swarmlets which will move south towards the Sahel. The situation is expected to improve during the forecast period as a result of control operations, unfavourable breeding conditions and migration.

There is a low probability that undetected breeding occurred in the Grand Erg Oriental in areas of unusual rains that fell in April.

**TUNISIA**

There is a low probability that a few adults could appear and breed in the extreme south where recent rains occurred.

**LIBYA**

There is a low probability that a few adults could appear in Al Hammada Al Hamra where recent rains occurred.

**EASTERN AFRICA****SUDAN**

Low numbers of adults are expected to appear in the summer breeding areas of central and western Sudan during the forecast period and lay with the onset of the seasonal rains.

**ERITREA**

A few isolated adults may persist in any areas that remain green on the Red Sea coastal plains; however, no significant developments are expected.

**ETHIOPIA**

A few isolated adults may occur in the Railway Area and breed in areas of recent rains.

**SOMALIA**

A few isolated adults may persist and breed in a few places along the northern coast where recent rains may have occurred.

**DJIBOUTI, KENYA, TANZANIA and UGANDA**

No significant developments are likely.

**NEAR EAST****SAUDI ARABIA**

A few isolated adults may be present on the southern Tihama near Jizan.

**YEMEN**

A few isolated adults may be present on the coastal plains east of Aden and in the interior desert areas from Shabwa to Marib.

**OMAN**

Scattered adults may be present in the Sharqiya.

**BAHRAIN, EGYPT, IRAQ, ISRAEL, JORDAN, KUWAIT, LEBANON, QATAR, SYRIA, TURKEY, UAE**

No significant developments are likely during the forecast period.

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

Infestations in Baluchistan will decline and no further developments are expected as adults move towards the summer breeding areas along the Indo-Pakistan border. Low numbers of adults are expected to appear in the Sind-Tharparkar area and lay with the onset of the monsoon rains during the forecast period.

**INDIA**

Current infestations will persist in Rajasthan and locust numbers are likely to increase as adults appear from the west and lay with the onset of the monsoon rains. However, infestations are expected to remain on a small scale.

**AFGHANISTAN and IRAN**

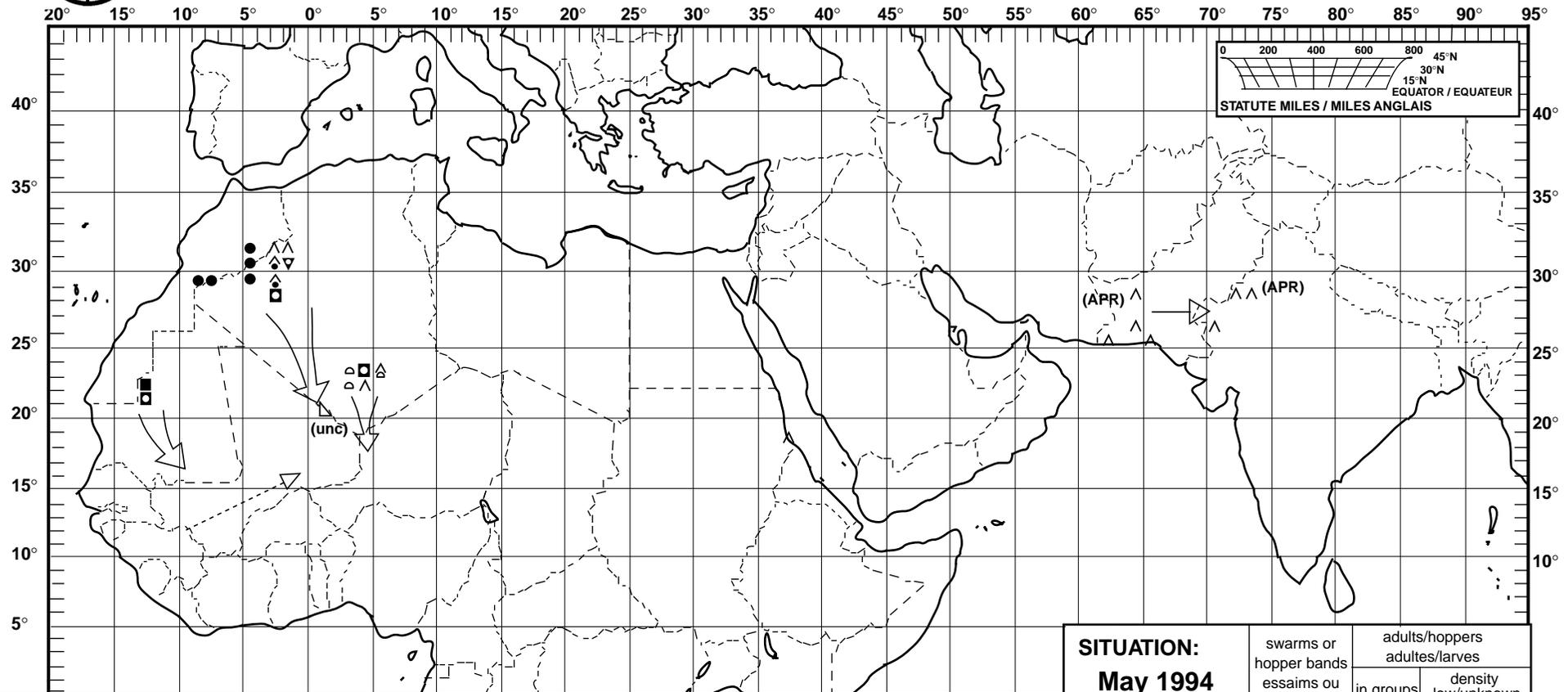
No significant developments are likely during the forecast period.

1 June 1994



# Desert Locust: summary Criquet pèlerin: situation résumée

## No. 189



FORECAST TO: PREVISION AU: 15.7.94	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: May 1994 mai 1994	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)			