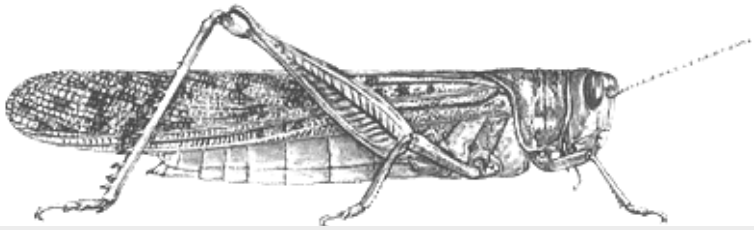

DESERT LOCUST BULLETIN

FAO Emergency Centre for Locust Operations

No. 248
(4 June 1999)

General Situation during May 1999
Forecast until mid-July 1999

The Desert Locust situation remained calm during May. No significant infestations were reported and dry weather prevailed in most areas. Heavy rains fell along the southern portion of the Indo-Pakistan border where breeding conditions will improve in the coming weeks. Low numbers of adults are expected to appear in the summer breeding areas of the Sahel in West Africa and Sudan and breed on a small scale once seasonal rains commence. No significant developments are expected.

Western Region. Dry and hot conditions prevailed throughout North-West and West Africa. Insignificant populations of locust adults were reported in **Morocco** and northern **Mauritania**. These will decline as adults move into the summer breeding areas of the Sahel. Summer rains have started in a few of these areas in southern Mauritania but additional rainfall is needed before conditions become favourable for breeding. No significant developments are expected.

Central Region. Light rains fell in northern **Somalia** and insignificant populations of adults were reported in a few places on the escarpment. Small scale breeding may occur in the coming weeks. Isolated adults were present in south-eastern **Egypt** where rains fell but conditions remained unfavourable for breeding. No locusts were reported along the Red Sea coastal plains due to the dry conditions. Low numbers of adults may start to appear in the interior of **Sudan** and breed on a small scale once the summer rains commence. No significant developments are expected.

Eastern Region. Scattered adults were present in Baluchistan, **Pakistan** where spring breeding was limited this year by poor rainfall. Heavy rains associated with a cyclone caused severe flooding and damage in south-eastern Pakistan. Some of the rains extended northwards to the summer breeding areas along the Indo-Pakistan border which may allow breeding to start earlier than normal this year and extend over a longer period. Nevertheless, it is expected to be on a small scale since few locusts are present in the Region.

The FAO Desert 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 Locusts and Other Migratory Pests Group, AGP Division, FAO, 00100 Rome, Italy. It is also available on the Internet.
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No. 248

DESERT LOCUST BULLETIN

Weather & Ecological Conditions in May 1999

Hot and dry weather prevailed in most Desert Locust recession areas during May. Breeding conditions were improving in northern Somalia as a result of light rainfall. Very heavy rains associated with a cyclone fell in south-eastern Pakistan and adjacent areas of Gujarat, India. Some of these extended into the summer breeding areas along the Indo-Pakistan border.

In **West Africa**, the Inter-Tropical Convergence Zone (ITCZ) remained south of the Desert Locust breeding areas except for a few days during the second half of May when it reached between 15N and 20N over Mauritania and Niger, bringing warm and humid air to these areas. As a result, the first rains of the summer season were reported in Mauritania on the 18th. These were very light and they were limited to just a few areas in the south and near Atar in the north. They were followed by light showers on the 29th in Hodh El Gharbi. Temperatures steadily increased during the month in Mauritania, reaching 44C (maximum) and 17C (minimum). Most areas remained dry and green vegetation was limited to just a few wadis. Elsewhere in the Region, conditions were dry and unfavourable for breeding. Prevailing winds were from the north and north-east.

In **North-West Africa**, mainly hot and dry conditions were reported. Light rains fell along the western coast near Sidi Ifni at mid month. Vegetation was dry and conditions were not favourable for breeding. In Algeria, isolated showers fell in a few areas of the northern Sahara. Vegetation remained dry throughout the Sahara except near In Salah where there was enough green vegetation for locust survival. Prevailing winds over the western portion of the Region were from the west and north-west.

In **Eastern Africa**, light rains fell throughout the month in northern Somalia, mainly along the border with Ethiopia east of Hargeisa and on the escarpment north of Boroma. Rains were heaviest on the escarpment between Hargeisa and Berbera and further east near Garoe and Gardo. As a result, vegetation was either green or becoming green in most areas on the escarpment but was dry on the coastal plains and along the Djibouti border which remained dry. In Ethiopia, light rains fell in the railway area near Dire Dawa and vegetation was becoming green at mid month. Light rains may have also fallen in the hills and coastal areas between Derudeb and Karora in north-eastern Sudan during the first dekad, and on the southern coastal plains of the Red Sea in Eritrea during the last dekad. The south-westerly wind flow over the Horn of Africa that is associated with the South-West Asian monsoon commenced in early May and was well established by mid month.

In the **Near East**, no significant rainfall was reported for the second month in a row. Light rains may have fallen along the Red Sea coast of Yemen from the Saudi Arabian border to the coastal plains of Aden and perhaps in the interior near Marib at times during the second half of May. In Saudi Arabia, dry conditions prevailed in coastal and interior areas. Although rains fell during the first week of May along the coastal plains and in the adjacent hills of south-eastern Egypt, vegetation was dry and breeding conditions were unfavourable in these areas.

In **South-West Asia**, no rainfall was reported in the spring breeding areas of Baluchistan. On 20 May, a cyclone with winds up to 270 kph struck the Arabian Sea coast near the Indo-Pakistan border in the Kutch district of Gujarat, India and moved west to southern Sindh province, Pakistan. Very heavy rains and tidal waves were reported in Kutch and southern Sindh. The hardest hit areas were Thatta and Badin districts in Sindh. Rainfall extended to Rajasthan where Bikaner reported 63 mm, Jaisalmer 19 mm, Barmer 10 mm, Jodhpur 9 mm in a 24 hour period on the 23rd. The cyclone had diminished by the 25th. As a result, breeding conditions in Rajasthan and in the adjacent desert areas in Pakistan may become favourable earlier than normal.

Area Treated

No control operations were reported during May.

Desert Locust Situation and Forecast

(see also the summary on the first page)

WEST AFRICA

Mauritania

• **SITUATION**

During May, isolated immature and mature adults were present at a few places north of Zouerate (2244N/1221W) and between Akjoujt (1944N/1420W) and Atar (2032N/1308W) at mid month.

• **FORECAST**

Low numbers of solitarious adults are likely to appear in central and southern areas where they will eventually lay eggs once the seasonal rains commence. No significant developments are likely.

Mali

• **SITUATION**

No reports received.

• **FORECAST**

Isolated locusts may be present in a few areas in the Adrar des Iforas. Small scale breeding could occur once the seasonal rains commence.

Niger

• **SITUATION**

No reports received.

• **FORECAST**

Isolated locusts may be present in a few areas in Tamesna. Small scale breeding could occur once the seasonal rains commence.

Chad

• **SITUATION**

No reports received.

• **FORECAST**

No significant developments are likely.

Senegal

• **SITUATION**

No reports received.

• **FORECAST**

No significant developments are likely.

Burkina Faso, Cape Verde, Gambia, Guinea Bissau, and Guinea Conakry

• **FORECAST**

No significant developments are likely.

NORTH-WEST AFRICA

Algeria

• **SITUATION**

No locusts were reported during May.

• **FORECAST**

Isolated adults may be present in a few places in the central Sahara near In Salah. No significant developments are likely.

Morocco

• **SITUATION**

Scattered immature adults were present in a few places along the southern side of the Atlas Mountains near Goulmima (3102N/0500W) from 30 April and 14 May.

• **FORECAST**

Locust numbers are expected to decline as a result of unfavourable breeding conditions. No significant developments are likely.

Libyan Arab Jamahiriya

• **SITUATION**

No locusts were reported during May.

• **FORECAST**

A few isolated adults may persist near the Algerian border in the Hamadat Al Hamrah.

Tunisia

• **SITUATION**

No locusts were reported during April.

• **FORECAST**

No significant developments are likely.

EASTERN AFRICA

Sudan

• **SITUATION**

No reports received.

• **FORECAST**

Low numbers of adults are expected to appear in a few places of the summer breeding areas of Northern Darfur, Northern Kordofan and Northern Provinces. Breeding will commence with the onset of the seasonal rains but is expected to be on a small scale. No significant developments are likely.

Eritrea

• **SITUATION**

No reports received.

• **FORECAST**

No significant developments are likely.

Somalia

• **SITUATION**

Isolated immature and maturing adults were present at four places on the escarpment west of Berbera (1028N/4502E), near Erigavo (1040N/4720E) and near Garoe (0817N/4820E) during May.

• **FORECAST**

Small scale breeding may occur in a few places on the escarpment between Boroma and Garoe but will be limited unless further rains fall.

Ethiopia

• **SITUATION**

No locusts were seen near Dire Dawa and in the surrounding areas in mid May.

• **FORECAST**

A few adults may appear in the Railway area where rains have fallen recently.

Djibouti

• **SITUATION**

No reports received.

• **FORECAST**

No significant developments are likely.

Kenya, Tanzania and Uganda

• **FORECAST**

No significant developments are likely.

NEAR EAST

Saudi Arabia

• **SITUATION**

No locusts were reported during May.

• **FORECAST**

No significant developments are likely.

Yemen

• **SITUATION**

No reports were received during May.

• **FORECAST**

No significant developments are likely.

Egypt

• **SITUATION**

Isolated solitarious locusts were present in a few places in the south-east near Lake Nasser and in the Red Sea Hills on 10 May.

• **FORECAST**

No significant developments are likely.

Kuwait

• **SITUATION**

No locusts were reported during March and April.

• **FORECAST**

No significant developments are likely.

Oman

• **SITUATION**

No reports received.

• **FORECAST**

No significant developments are likely.

UAE

• **SITUATION**

No reports received.

• **FORECAST**

No significant developments are likely.

Bahrain, Iraq, Israel, Jordan, Qatar, Syria Arab Republic and Turkey

• **FORECAST**

No significant developments are likely.

SOUTH-WEST ASIA

Iran

• **SITUATION**

No reports received.

• **FORECAST**

No significant developments are likely.

Pakistan

• **SITUATION**

During the second fortnight of April, isolated maturing adults at densities of up to 10 per ha were reported from 24 places in coastal and interior areas of Baluchistan. Similar populations were present in the Uthal area at five places.

During the first fortnight of May, scattered adults persisted in the above areas and there was no significant change in the situation.

• **FORECAST**

Locusts will decline in spring breeding areas of Baluchistan as conditions become drier. Low numbers of solitary adults are expected to appear along the Indo-Pakistan border where breeding, which is expected to be on a small scale, may start earlier than normal in areas that received rainfall associated with the recent cyclone.

India

• **SITUATION**

No locusts were seen during the second fortnight of April and the first fortnight of May.

• **FORECAST**

Isolated adults may be present in a few places in Rajasthan. Summer breeding, which is expected to be on a small scale, may start earlier than normal in areas that received rainfall associated with the recent cyclone.

Afghanistan

• **SITUATION**

No reports received.

• **FORECAST**

No significant developments are likely.

Other Migratory Pests

Armyworm Outbreak. The largest armyworm (*Spodoptera exempta*) outbreak for more than ten years has infested, successively, Tanzania, Rwanda, Burundi, Kenya, Somalia, Ethiopia and Yemen. Control operations have been mounted in most of these countries in an attempt to limit damage to crops and sometimes to pastureland, but these have often been late in being implemented.

Announcements

Locust reporting. Affected countries are kindly reminded to make sure that locust situation reports are sent to FAO HQ by the 25th day of the month so the information can be included in the FAO bulletin for the current month; otherwise, it will not appear until the following month. Reports should be sent even if no locusts were found or if no surveys were conducted.

FAO Desert Locust Control Committee. The 35th session was held in Rome on 24-28 May. More than 50 countries attended the meeting.

FAO Commission for Controlling the Desert Locust in North-West Africa. The 22nd session will be held on 21-25 June in Rabat, Morocco.

Glossary of terms

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

NON-GREGARIOUS ADULTS AND HOPPERS

ISOLATED (FEW)

- very few present and no mutual reaction occurring;
- 0 - 1 adult/400 m foot transect (or less than 25/ha).

SCATTERED (SOME, LOW NUMBERS)

- enough present for mutual reaction to be possible but no ground or basking groups seen;
- 1 - 20 adults/400 m foot transect (or 25 - 500/ha).

GROUP

- forming ground or basking groups;
- 20+ adults/400 m foot transect (or 500+/ha).

ADULT SWARM AND HOPPER BAND SIZES

VERY SMALL

- swarm: less than 1 km^2 • band: 1 - 25 m^2

SMALL

- swarm: 1 - 10 km^2 • band: 25 - 2,500 m^2

MEDIUM

- swarm: 10 - 100 km^2 • band: 2,500 m^2 - 10 ha

LARGE

- swarm: 100 - 500 km^2 • band: 10 - 50 ha

VERY LARGE

- swarm: 500+ km^2 • band: 50+ ha

RAINFALL

LIGHT

- 1 - 20 mm of rainfall.

MODERATE

- 21 - 50 mm of rainfall.

HEAVY

- more than 50 mm of rainfall.

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.

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.

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

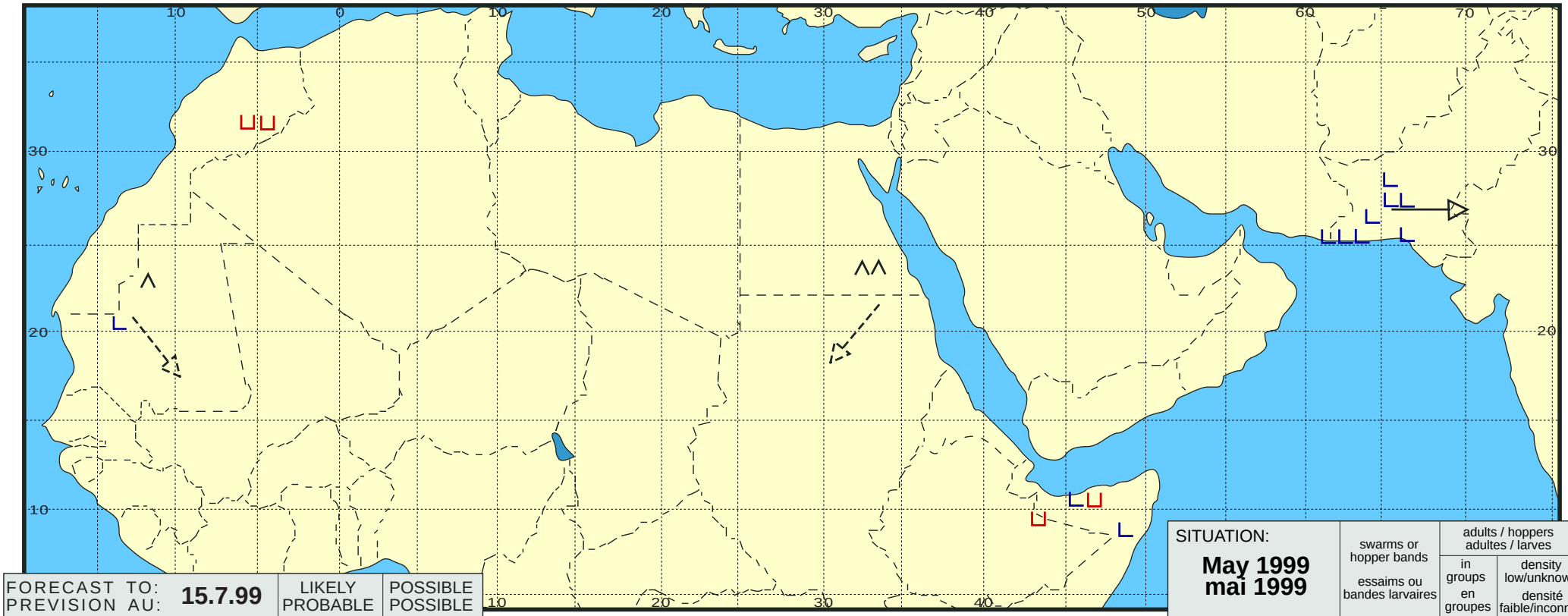
- period without widespread and heavy infestations by swarms.

REMISSION

- period of deep recession marked by the complete absence of gregarious populations.

Desert Locust Summary
Criquet pèlerin situation résumée

248



FORECAST TO: PREVISION AU: **15.7.99**	LIKELY PROBABLE	POSSIBLE POSSIBLE
favourable breeding conditions conditions favourables à la reproduction		
major swarm(s) essaim(s) important(s)		
minor swarm(s) essaim(s) limité(s)		
non swarming adults adultes non essaimant		

SITUATION: **May 1999 mai 1999**	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	◣	◺	L
adults, maturity unknown adultes, maturité inconnue	▲	△	Λ
egg laying or eggs pontes ou œufs	▼	▽	V
hoppers larves	●	○	◡
hoppers & adults (combined symbol example) larves et adultes (exemple symboles combinés)	◘	◙	⊍