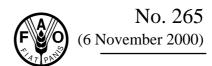


## DESERT LOCUST BULLETIN

## **FAO Emergency Centre for Locust Operations**





# General Situation during October 2000 Forecast until mid-December 2000

A small outbreak has developed in central Mauritania where above-average rains fell and hoppers have started to form a few small bands. A similar outbreak may be in progress in northern Mali. During the forecast period, groups and perhaps a few small swarms could form in both countries. Those in northern Mali are likely to move towards southern Algeria or northern Mauritania. Elsewhere, small scale breeding occurred in central Sudan and isolated adults were present on the Red Sea coast of Yemen, in north-western Somalia, and along the Indo-Pakistan border. During the forecast period, low numbers of adults are likely to appear on the Red Sea coastal plains where conditions are already favourable for breeding.

Western Region. Summer breeding continued in central Mauritania and has led to a small outbreak. Hopper groups and bands started to form by the end of October and control operations were carried out on about 54 ha. As unusually heavy and late rains fell over a large part of the summer breeding areas, locust populations may persist a bit longer than normal. However, once vegetation starts to dry out, small groups of adults and perhaps a few swarmlets are likely to move towards northern Mauritania. In northern Mali, travellers and nomads reported adult

groups and swarms in early September. They also reported early instar hopper bands in late September and again in early October. Fledging is likely from mid October until December. As vegetation is starting to become dry, small groups and swarms may form in early November. Some are likely to move towards southern **Algeria** where low numbers of locusts may already be present while others may move towards northern Mauritania. In September, scattered adults were present in north-western **Niger**.

Central Region. Isolated adults and hoppers were seen in central Sudan indicating that small scale summer breeding has occurred but is not likely to continue as conditions are drying out. Low numbers of adults were present in north-western Somalia and on the Red Sea coast of Yemen. As a result of good rainfall, breeding conditions are becoming favourable along the coastal plains on both sides of the Red Sea in Sudan, Eritrea, Saudi Arabia and Yemen. The locusts reported in southern Egypt during September (Bulletin No. 264) were confirmed as Desert Locust.

**Eastern Region.** Only low numbers of solitarious adults were present in the summer breeding areas of **Pakistan** along the border with India. No locusts were reported in **India**. No significant developments are likely in these areas and very few adults are expected to move towards the spring breeding areas of western Pakistan this year.

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.

Telephone: +39 06 570.52420 (7 days/week, 24 hr)

Facsimile: +39 06 570.55271 E-mail: eclo@fao.org Telex: 610181 FAO 1

Internet: http://www.fao.org/news/global/locusts/locuhome.htm



## DESERT LOCUST BULLETIN



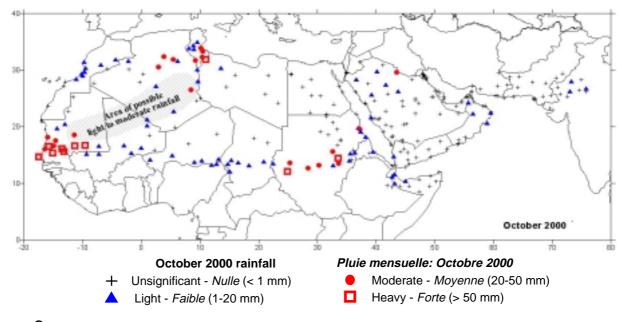
Breeding conditions remained favourable in some parts of Mauritania where exceptional rains fell during October. Elsewhere in West Africa, the vegetation is drying out as the seasonal rains have ended. Conditions are improving on the Red Sea coastal plains of Yemen, Saudi Arabia, Sudan and Eritrea where moderate to heavy rains fell. Conditions were no longer favourable for breeding along the Indo-Pakistan border.

In **West Africa**, the ITCZ retreated progressively southwards during October, from 12-18N in the first dekad to about 5-10N at the end of the month. Associated with this retreat, north-easterly and easterly winds (the harmattan) became established by the second fortnight of the month. Exceptional rains, about four times the monthly long-term average, fell over most of southern, central and western Mauritania during the two first dekads, compared to the rest of the West-African Sahel where the rains finished at the end of September (see map). As a result, vegetation remained green and conditions were favourable for breeding in central and western Mauritania from western Inchiri to northern Brakna and south-western Tagant. Elsewhere in Mauritania and in northern Mali, green vegetation was confined to most wadis and lowlying areas. Vegetation was dry or becoming dry and conditions were generally unfavourable for breeding in Tamesna and Air, Niger and in Chad. Light to moderate rains, associated with several eastward moving depressions, may have fallen during a five day period in parts of an area extending from eastern Mauritania to northern Mali.

In **North-West Africa**, devastating floods resulted from moderate to locally heavy rains reported from several places in northern Algeria and Tunisia as well as along the Algerian-Libyan border. Moderate rains, associated with the depressions mentioned above, may have fallen in or near the Hoggar Mountains of southern Algeria. Vegetation remained generally dry and conditions were unfavourable for breeding in the Region except, perhaps, for a few wadis in southern Algeria.

In Eastern Africa, moderate to locally heavy rains were reported in the southern Sahelian belt of Sudan where seasonal vegetation was green. North of this belt, most areas of Northern Kordofan and Northern Darfur were drying out and conditions were unfavourable for breeding at the end of the month. As a result of good rains, breeding conditions were becoming favourable on the Red Sea coast where vegetation was greening in many areas from Eight, north of Port Sudan, to southern Eritrea. Light rains fell on the north-western coastal plains of Somalia.

In the **Near East**, moderate rains fell on several different days during the month on the southern Red Sea coastal plains from southern Saudi Arabia to Yemen. Vegetation is greening in the Jizan area and is already green in the main wadis on the Red Sea coastal plains of Yemen. Conditions are favourable for breeding in most of these areas.



In **South-West Asia**, no rainfall was reported for the second consecutive month along the Indo-Pakistan border and conditions were not favourable for breeding.



#### Area Treated

Mauritania 54 ha (21-31 October)



## Desert Locust Situation and Forecast

( see also the summary on the first page )

#### **WEST AFRICA**

## Mauritania

#### • SITUATION

Low numbers of mature adults were present and breeding continued during October in parts of Trarza, Brakna, Tagant, and Inchiri. Solitarious hoppers increased throughout the month and some of these became progressively more gregarious, forming small groups in a few places by mid month. Most of the hopper infestations were present where locusts were reported in September: between Moudjeria (1750N/ 1250W), Tidjikja (1832N/1125W) and Akjoujt (1945N/ 1421W). By the end of the month, several dense patches of hoppers were found in southern Adrar and bands at densities up to 500 per sq. m were reported from Trarza. The sizes of the groups and bands varied from several square metres to several hectares. Ground teams initiated control operations during the last dekad and treated 54 ha of small hopper groups and bands. In Inchiri, scattered hoppers of all instars were reported for the first time in the Benichab/Akchar area (ca. 1930N/1530W) at the end of the month, suggesting that breeding had started in that area in early September.

## • FORECAST

Hoppers will continue to form groups and small bands during November primarily in Trarza and southern Adrar but this could extend to parts of Brakna, Tagant and Inchiri. The majority of fledging is expected to occur during the second half of November, and adult groups and small swarms are likely to form. These may persist a bit longer than normal due to the unusually good rains that recently fell. However, once vegetation starts to dry out, they are likely to move northwards into Inchiri, Adrar and Tiris-Zemmour. These locusts may be joined by scattered locusts and possibly swarmlets from Mali.

#### Mali

#### SITUATION

During September, maturing swarms and adult concentrations were seen in western Adrar des Iforas mainly between Tessalit (2012N/0059E and the Algerian frontier) early in the month and first to third instar bands mixed with adults were seen at nine locations in that area in the last dekad.

During the first dekad of October, several first to third instar bands were seen at five locations farther south in western Adrar des Iforas.

#### • Forecast

Additional hatching and band formation could occur for a few more weeks. Several swarms could start to form from the beginning of November onwards. As conditions are beginning to dry out, these scattered locusts and swarmlets may move north into southern Algeria or north-west into northern Mauritania.

### Niger

#### • SITUATION

A late report indicated that low numbers of adults were present during September near In Abanrherit, Tamesna. No locusts were reported during the first two dekads of October.

#### • Forecast

No significant developments are likely.

#### 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.





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## DESERT LOCUST BULLETIN

#### **NORTH-WEST AFRICA**

#### Algeria

• SITUATION

No locusts were reported during October.

• Forecast

Low numbers of locusts are likely to be present in parts of the Tassili region and in the south-west where breeding on a small scale could occur in these areas of recent rainfall. Moreover, a few groups or swarmlets could appear in the south from northern Mali during November.

#### Morocco

SITUATION

No locusts were reported in the south and southeast during October.

Forecast

No significant developments are likely.

## Libyan Arab Jamahiriya

• SITUATION

No locusts were reported during October.

• Forecast

No significant developments are likely.

### **Tunisia**

• SITUATION

No reports received.

• Forecast

No significant developments are likely.

## **EASTERN AFRICA**

## Sudan

• SITUATION

A few immature adults mixed with solitary fifth and sixth instar hoppers and fledglings were seen in Northern Kordofan at Umm Sabiba (1415N/3109E) during October. No locusts were reported in the winter breeding areas on the Red Sea coastal plains although ecological conditions were already favourable.

## • Forecast

Low numbers of solitarious adults are likely to appear and breed in areas of recent rainfall along the Red Sea coastal plains from north of Port Sudan to Karora.

#### **Eritrea**

• SITUATION

No locusts were seen during surveys along the Red Sea coast during October.

#### • FORECAST

Low numbers of adults could start to appear and breed in a few places along the coastal plains north of Massawa and near Foro during the forecast period. No significant developments are likely.

#### Somalia

• SITUATION

A few immature adults were seen in the greening wadi Baregid (1055N/4342E) on 12 October along the coastal plain north of Hargeisa. No other locusts were seen during surveys carried out from 8 to 13 October on the northwestern plateau and coastal plain.

#### • Forecast

Low numbers of adults may persist and mature in a few areas where ecological conditions are favourable. No significant developments are likely.

#### **Ethiopia**

• SITUATION

No reports received.

• Forecast

No significant developments are likely.

#### Djibouti

• SITUATION

No reports received.

• FORECAST

No significant developments are likely.

## Kenya, Tanzania and Uganda

• Forecast

No significant developments are likely.

#### **NEAR EAST**

#### **Egypt**

• SITUATION

The locusts reported in the south during September were confirmed as Desert Locust. During surveys carried out in October, no locusts were seen on the Red Sea coastal plains from Safaga to the Sudanese border, in adjacent subcoastal areas and in oases in the Western Desert.

• Forecast

No significant developments are likely.

## Saudi Arabia

• SITUATION

No reports received.

• Forecast

Isolated adults may be present near Jizan where numbers could gradually increase as a result of breed-

ing in areas of significant rainfall recorded over the last few dekads.

#### Yemen

#### SITUATION

A few mature adults were seen on the Red Sea coastal plain at Deer Abdalla (1531N/4304E) during surveys carried out from 11 to 12 October.

#### • Forecast

Locust numbers are expected to increase slightly as small scale breeding is likely in areas of recent rainfall on the Red Sea coastal plains between Zabid and the Saudi Arabian border. Low numbers of adults may present on the coastal plains west of Aden and in the interior of Shabwa where rains have fallen.

#### Kuwait

• SITUATION

No reports received.

Forecast

No significant developments are likely.

#### **Oman**

#### • SITUATION

A late report indicated that no locusts were seen during surveys carried out in northern Oman from 17 to 30 September.

#### • Forecast

No significant developments are likely.

#### **United Arab Emirates**

• 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 October, low numbers of solitarious maturing adults, up to 5 per ha, were present at 13 locations in Cholistan and Tharparkar deserts.

#### • Forecast

Small number of locusts may move towards the winter and spring areas of coastal Baluchistan.

#### India

#### • SITUATION

No locusts were reported from the second half of September to the end of October.

#### • FORECAST

No significant developments are likely.

#### **Afghanistan**

SITUATION

No reports received.

• Forecast

No significant developments are likely.



## **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.

Reporting by email. Affected countries are encouraged to send completed FAO Desert Locust Survey and Control Forms with a brief interpretation of the results by email to <a href="mailto:eclo@fao.org">eclo@fao.org</a>.

#### **EMPRES (Desert Locust) Central Region**

**Programme.** Two events have been arranged in next few weeks. A Research Workshop will be held in Cairo, Egypt from 6-8 November. The 3<sup>rd</sup> EMPRES Consultative Committee will be held in Rome from 4-5 December.

## **EMPRES (Desert Locust) Western Region**

**Programme.** The Planning Workshop: EMPRES activities in the Western Region – Phase I: Pledges and operations, will be held in Nouakchott, Mauritania from 12-16 February 2001.





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**The Commission for Controlling the Desert** Locust in the Central Region. The 24th Session of the Commission will be held in Cairo, Egypt in April

Desert Locust Control Committee. The 36th Session of the DLCC will be held in Rome in early June 2001.

**Commission for Controlling the Desert Locust** in North-West Africa. The 23rd Session of the Commission will be held in Algiers, Algeria from 15-22 June 2001.

Mali information. The dekadal Agro-Hydro-Meteorological Bulletins from Mali, including current crop pest situation and rainfall, are available on the

http://www.cip.ogp.noaa.gov/rcp/a/country/mali.html



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

## **RAINFALL**

LIGHT

• 1 - 20 mm of rainfall.

MODERATE

• 21 - 50 mm of rainfall. HEAVY

· more than 50 mm of rainfall.

## **ADULT SWARM AND HOPPER BAND SIZES**

• swarm: less than 1 km2 • band: 1 - 25 m<sup>2</sup>

swarm: 1 - 10 km<sup>2</sup>

• band: 25 - 2,500 m<sup>2</sup>

MEDIUM

SMALL

swarm: 10 - 100 km²

• band: 2,500 m<sup>2</sup> - 10 ha

LARGE

swarm: 100 - 500 km<sup>2</sup>

**VERY LARGE** 

• band: 10 - 50 ha

• swarm: 500+ km2

• band: 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.

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

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