

## DESERT LOCUST BULLETIN

## FAO Emergency Centre for Locust Operations



No. 275 (6 Sep 2001)

## General Situation during August 2001 Forecast until mid-October 2001

The Desert Locust situation remained calm during August. Although conditions are exceptionally favourable in the summer breeding areas, only insignificant numbers of locusts have been reported to date in Egypt, Mauritania, and Sudan and along the Indo-Pakistan border. Smallscale breeding is expected to continue somewhat longer than in most years but locust numbers are expected to continue to remain at non-threatening levels during the forecast period.

Western Region. The situation remained calm throughout the Region in August. Very low numbers of solitarious adults were reported in southern Mauritania and similar numbers are likely to be present in northern Mali and Niger and, perhaps, in northeastern Chad. Although conditions are favourable over most of the summer breeding areas, only small-scale breeding has been detected so far in Mauritania. Locusts are expected to gradually increase during the forecast period as breeding continues, but numbers will remain at non-threatening levels.

<u>Central Region</u>. Unusually heavy rains caused flooding along the Nile and Atbara rivers in **Sudan** as well as in eastern Sudan including Tokar Delta and in western **Eritrea**. Although breeding conditions are exceptionally favourable in both countries, only isolated locusts have been found so far in Sudan. Small-scale breeding will occur during the forecast period but locust numbers should continue to remain low and non-threatening. Good rains also fell on the Red Sea coast and interior of **Yemen**, on the southern Red Sea coast of **Saudi Arabia** and on the escarpment in northwestern **Somalia**. Scattered adults and small-scale breeding may occur in these areas. A few locusts mixed with other species persisted in agricultural schemes in the Western Desert of **Egypt** where control was undertaken.

**Eastern Region.** Good breeding conditions prevailed along the **Indo-Pakistan** border where monsoon rains continued but only isolated adults have been reported so far. Although small-scale breeding is almost certainly in progress and will continue during the forecast period, locust numbers should remain at a low and non-threatening level.

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



Good rains fell for the third consecutive month in the summer breeding areas of the Sahel in West Africa and Sudan and along the Indo-Pakistan border. Conditions are likely to remain favourable for breeding longer this year than in most years.

In West Africa, the Inter-Tropical Convergence Zone (ITCZ) fluctuated between 15-20°N over West Africa and at times reached as far north as 25°N and as far south as 10°N. Good rains fell throughout the region during August. In Mauritania, rainfall was heaviest and well distributed in the two Hodhs and to a lesser extent in Brakna, Assaba and Trarza. Rains were more sporadic in Tagant and traces fell in southwestern Adrar. The northern extent of green vegetation is about 18°N or roughly along an eastwest axis north of Oualata - In Amar - Tidjikja north of Magta Lahjar - south of Nouakchott. Breeding conditions are favourable throughout these areas. In Mali, good rains fell in the southern Adrar des Iforas and adjacent areas of Tamesna. Green vegetation is present in the main wadis of these areas south of 20°N and isolated patches are present near Tin Kar, Timetrine. In Niger, good rains fell in parts of Tamesna and western Air where green vegetation is present and conditions are favourable for breeding. In eastern Chad, vegetation is green to about Fada (17°N).

In **North-West Africa**, hot and dry conditions persisted throughout the region and no significant rainfall was reported. Consequently, ecological conditions were not favourable for breeding.

In **Eastern Africa**, good rains fell throughout the region during August. Heavy rains fell in Sudan and the highlands of Eritrea and Ethiopia causing the Nile and Atbara rivers to flood as well as Khor Baraka in Tokar Delta. Vegetation is green in the summer breeding areas south of 16°N in Northern Darfur as far north as the Teiga Plateau, in Northern Kordofan and along the banks of the Atbara River, the Gash near Kassala and Khor Baraka. Vegetation was also green in the western lowlands of Eritrea and in Ethiopia

along the railway and in the northern Ogaden due to the heavy rains. In Northern Somalia, heavy rains fell on the escarpment between Hargeisa and the Djibouti border as well as in most of Djibouti. Breeding conditions are favourable in all of these areas.

In the **Near East**, good rains fell along the Red Sea coastal plains from Jizan, Saudi Arabia to Zabid, Yemen as well as in the interior of Yemen in Shabwah and Hadramaut. A total of 206 mm was reported in Jizan during the first two weeks of August. In Yemen, green vegetation is present in the main wadis along the Red Sea coast, in parts of Shabwah, near Marib and perhaps on the southern edge of the Empty Quarter in Wadi Markhah and the plateau north of Sayoun. Elsewhere, dry conditions prevailed except for the coastal plains of Salalah, Oman where the summer monsoon is in progress.

In **South-West Asia**, good rains associated with the monsoon fell for the third consecutive month over much of the summer breeding area along both sides of the Indo-Pakistan border. Green vegetation was present in Tharparkar, southern Khairpur and Cholistan deserts in Pakistan and in most of Rajasthan, India. Breeding conditions are likely to remain favourable longer this year than in normal years due to the exceptionally heavy monsoon rains.



Egypt 360 ha 1

<sup>1</sup> mainly Migratory Locust and grasshoppers mixed with some Desert Locust



## Desert Locust Situation and Forecast

(see also the summary on the first page)

## WEST AFRICA

Mauritania

SITUATION

During August, isolated solitarious mature adults were reported from the 9th onwards scattered within several main areas: northeast of Nema (1632N/ 0712W), north and northwest of Aioun (1702N/ 0941W), between Nema and Aioun, and northwest of Moudjeria (1751N/1228W). A few first and second instar hoppers were seen in the latter area on the 20-21st suggesting that small scale breeding is in

page 2 of 7

progress but that hoppers numbers are low and difficult to detect. There was also one report of isolated adults in the southwest of the country.

• FORECAST

Breeding will continue throughout the forecast period but locust numbers will remain low. A few new adults will start to appear during the second half of September. Despite unusually good conditions, no significant developments are expected.

#### Mali

• SITUATION

No reports received.

• FORECAST

Scattered adults are likely to be present and breeding on a small scale in the main wadis of the southern Adrar des Iforas and in adjacent areas of Tamesna. Although this is expected to continue during the forecast period, locust numbers are likely to remain low.

#### Niger

• SITUATION

No reports received.

• FORECAST

Scattered adults are likely to be present and breeding on a small scale in parts of Tamesna as far north as In Abangharit and in the western Air. Although this is expected to continue during the forecast period, locust numbers are likely to remain low.

#### Chad

• SITUATION

No reports received.

#### • FORECAST

A few isolated adults may be present and breeding on a small scale in parts of Biltine and near Fada in BET.

#### Senegal

#### SITUATION

No locusts were reported in the Senegal River Valley up to 31 August.

• 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 July and August.

#### • FORECAST

No significant developments are likely.

#### Morocco

- SITUATION
- No locusts were reported during August.
- FORECAST

No significant developments are likely.

### Libyan Arab Jamahiriya

• SITUATION

No locusts were reported and no surveys were carried out in August.

#### • FORECAST

No significant developments are likely.

#### Tunisia

• SITUATION

No reports received.

• FORECAST

No significant developments are likely.

## **EASTERN AFRICA**

## Sudan

SITUATION

A late report indicated that isolated mature adults were found at two more locations in Northern Kordofan in July: Umm Sidir (1411N/3059E) and Umm Razuga (1407N/3105E) on the 23rd.

During August, similar infestations at densities up to 250 per ha were found in Northern Kordofan at several locations north of Sodiri (1423N/2906E) during a joint survey in the last week of the month.

• FORECAST

Small scale breeding is likely to be in progress in Northern Darfur and Northern Kordofan and will continue during the forecast period. Consequently, locust numbers will gradually increase but remain at non-threatening level. Scattered adults may appear in areas of recent flooding near Kassala, along the Atbara River and, perhaps by the end of the forecast period, in Tokar Delta where conditions are likely to become favourable earlier than usual due to the recent flooding.

## Eritrea

#### SITUATION

No locusts were reported during August.



No. 275

DESERT LOCUST BULLETIN



• FORECAST

Scattered adults are likely to be present and breeding on a small scale in areas of recent rainfall on the Red Sea coastal plains and perhaps in the Shabwah region of the interior. Surveys continue to be recommended in these areas to confirm the situation.

## Egypt

### • SITUATION

During August, isolated immature adults were reported at a few places along the Red Sea coastal plains and subcoastal areas near Halaib (2212N/ 3635E). Mixed infestations of grasshoppers, Migratory Locust and a few Desert Locust adults and hoppers persisted in cropping areas at Sh. Oweinat (2240N/ 2845E) where 630 ha were treated during the month.

• FORECAST

Low numbers of Desert Locust will persist and become mixed with other locust and grasshopper species in agricultural areas at Sh. Oweinat and Tushka. No significant developments are likely.

#### Kuwait

- SITUATION
- No reports received.

• FORECAST

No significant developments are likely.

#### Oman

• SITUATION

No locusts were reported and no surveys were carried out in August.

• 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 locusts were seen during surveys in Kerman, Hormozgan and Sistan Baluchistan provinces in August.

• FORECAST

No significant developments are likely.

DESERT LOCUST BULLETIN

#### • FORECAST

Scattered adults are likely to be present and breeding on a small scale in the western lowlands.

#### Somalia

#### • SITUATION

No reports received.

#### • FORECAST

Scattered locusts may be present in a few areas of the northwestern escarpment and breeding in areas of recent rainfall. No significant developments are likely.

#### Ethiopia

#### • SITUATION

No locusts were reported in the eastern region during August.

#### • 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

#### Saudi Arabia

- SITUATION
- No locusts were reported during August.
- FORECAST

Scattered adults may be present and breeding on the Red Sea coastal plains near Jizan. No significant developments are likely.

#### Yemen

## • SITUATION

Although no surveys were carried out during August, there were two unconfirmed reports of isolated solitarious locusts, one on the Red Sea coastal plains near Zabid (1403N/4318E) and the other in the Shabwah interior near Wadi Markhah (1459N/4548E).

#### Pakistan

#### SITUATION

During the second half of July, there was no significant change in the locust situation along the Indo-Pakistan border and in the Las Bela area where insignificant numbers of solitarious mature adults continued to be reported.

No reports were received during the first half of August. During the second half of the month, low numbers of mature solitarious adults at densities of up to 8 per ha were reported at 21 locations along the Indo-Pakistan border and at two places in Las Bela.

• FORECAST

Small-scale breeding is likely to be in progress for the second consecutive month within a large portion of the summer breeding areas between Tharparkar and Cholistan where good monsoon rains have fallen. Consequently, locust numbers will gradually to increase but remain at non-threatening levels during the forecast period.

#### India

#### SITUATION

During the first half of August, isolated adults were reported at one location in Bikaner district and at two places in Jaisalmer district in Rajasthan.

#### FORECAST

Small-scale breeding is likely to be in progress for the second consecutive month in Rajasthan, primarily near the Pakistani border between Barmer, Jaisalmer and Bikaner. Consequently, locust numbers will gradually to increase but remain at non-threatening levels during the forecast period.

#### 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 eclo@fao.org.

eLocust. Details of a new system under evaluation for recording and transmitting locust survey and control data collected in the field can be found on the Internet at:

http://www.fao.org/news/2001/010601-e.htm

Upcoming meetings. The following meetings are scheduled:

- 36th session of the DLCC, 24-28 September 2001 (Rome) which coincides with the 50th anniversary of FAO's involvement in Desert Locust management
- 9th EMPRES Liaison Officers Meeting, 13-18 October 2001 (Khartoum)
- Expert Consultation on the Registration of Biopesticides for Desert Locust Control, 3-7 December 2001 (Rome)
- 4th EMPRES Consultative Committee Meeting, 15-17 January 2002 (Cairo)
- 23rd session of the FAO Commission for Desert Locust Control in the Central Region (CRC), 10-15 March 2002 (Damascus)



No. 275

DESERT LOCUST BULLETIN



No. 275

DESERT LOCUST BULLETIN



## 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

•	swarm: less than 1 km <sup>2</sup>	• band: 1 - 25 m <sup>2</sup>
	SMALL	
•	swarm: 1 - 10 km <sup>2</sup>	• band: 25 - 2,500 m <sup>2</sup>
	MEDIUM	
•	swarm: 10 - 100 km <sup>2</sup>	• band: 2,500 m <sup>2</sup> - 10
	LARGE	

- swarm: 100 500 km<sup>2</sup>
  band: 10 50 ha
  VERY LARGE
- swarm: 500+ km<sup>2</sup> band: 50+ ha

#### RAINFALL

LIGHT

- 1 20 mm of rainfall.
- 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

ha

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

page 6 of 7



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