

DESERT LOCUST BULLETIN

FAO Emergency Centre for Locust Operations



No. 298

(5 August 2003)



General Situation during July 2003 Forecast until mid-September 2003

The Desert Locust situation remained calm during July. Limited control operations were carried out in southern Algeria against hopper and adult groups. Elsewhere, low numbers of locusts were reported in the summer breeding areas in Niger, Chad, Sudan and Pakistan. Similar populations are likely to be present in Mauritania, Mali, India and in southern Algeria. Good rains fell throughout most of these areas in July and conditions are favourable for breeding. Consequently, locust numbers are expected to increase during the forecast period. The situation should be monitored closely in all affected countries by regularly carrying out surveys in the breeding areas.

Western Region. Ground control operations were carried out in early July against dense groups of hoppers and immature adults near the Malian border in southern Algeria where undetected breeding occurred in May. Small-scale breeding has already commenced in Niger and is likely to be in progress or will occur shortly in southern Mauritania, northern Mali and eastern Chad. Good rains fell throughout most of these areas during July and conditions are favourable for breeding. Additional breeding may occur in southern Algeria where rains may have fallen further north this year than in the last few summers.

Central Region. Scattered adults were reported in Northern Kordofan, Sudan and are likely to be present in Northern Darfur and in the east near the Eritrean border where good rains fell during July. Locust numbers will increase in these areas because of small-scale breeding during the coming weeks. No locusts were reported elsewhere in the region except for a few Desert Locust mixed with African Migratory Locust that persisted in an agricultural scheme in southern Egypt. Conditions were improving in parts of the summer breeding areas in the interior of Yemen.

Eastern Region. Isolated mature adults were reported in the summer breeding areas in Pakistan and are likely to be present in adjacent areas in Rajasthan, India. Conditions are favourable for breeding due to good monsoon rains that fell in July over a widespread area on both sides of the Indo-Pakistan border. Consequently, small-scale breeding will occur during the forecast period and locust numbers will increase but remain below threatening levels.

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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Weather & Ecological Conditions in July 2003

Conditions are favourable in nearly all summer breeding areas from Mauritania to Sudan and along the Indo-Pakistan border due to exceptionally good rainfall during July. Unusual rainfall was reported in western Pakistan, on the western side of the Red Sea and in northwestern Mauritania.

In the **Western Region**, the Inter-Tropical Convergence Zone (ITCZ) oscillated between 12N and 20N during July with periodic surges to 23-26N over northern Mali, extending into the Tanezrouft region in southern Algeria. Good rains associated with the northern positions of ITCZ fell over a large portion of the summer breeding area from Mauritania to Chad. In Mauritania, rains improved during the second half of July and by the end of the month, good rains had been received in the two Hodhs, Brakna, and in parts of Trarza and Assaba. Light to moderate rainfall was reported in Tagant as well as in a few places in Inchiri and southern Adrar, which is unusual for this time of year. Vegetation is reported to be green and conditions are favourable for breeding in the south up to 18N. Light to moderate rains fell in parts of southern Algeria during July. As a result, ecological conditions were improving in many of the wadis near Tamanrasset. Green vegetation was present in several of the main wadis in the Adrar des Iforas, northern Mali and extended across the border into southern Algeria near Bordj Bir Mokhtar. In Niger, light to moderate rains fell in Tamesna and Air during July where conditions are favourable for breeding. In Chad, breeding conditions were improving in the east and northeast between Abeche and Fada.

In the **Central Region**, good rains fell throughout most of July in nearly all of the summer breeding areas in Sudan, extending from the Chad border to the Eritrean border. Consequently, green vegetation was present in Northern Kordofan and conditions are favourable for breeding in most areas. Similar conditions are believed to be present in Northern Darfur and near Kassala. Unusual rainfall was reported on the Red Sea coastal plains in Sudan (Suakin, 20 mm) and Eritrea (Massawa, 13 mm; Mehimet, 12 mm). In

Eritrea, vegetation was dry along the Red Sea coastal plains but should be improving in the western lowlands. Moderate rains fell in early July along parts of the central Red Sea coast in Yemen and light rains fell in parts of the summer breeding areas at mid-month between Marib and Sayun. Green vegetation was present in the interior near Marib while it was dry in other parts of Shabwah and Wadi Hadhramaut. In northern Somalia, vegetation was dry along the coastal plains and the escarpment. Green vegetation was present in a few places on the plateau near Hargeisa and Boroma, and good rains fell in adjacent areas in eastern Ethiopia. In Oman, misty conditions associated with the southwest monsoon persisted in the Dhofar region in the south.

In the **Eastern Region**, ecological conditions improved in the summer breeding areas along the Indo-Pakistan border due to widespread monsoon rains during July. Heavy rains fell in Rajasthan, India at Jodhpur (138 mm), Bikaner (107 mm) and Barmer (99 mm) while moderate rains were reported from Jaisalmer (31 mm). Heavy rains also fell in the Tharparkar Desert, Pakistan, at Chhor (400 mm) and Mirpurkhas (173 mm), and in the Cholistan Desert at Bahawalpur (63 mm). Unusual rainfall occurred in the interior and coastal areas in Baluchistan, Pakistan but this is not likely to have a significant impact on the Desert Locust.



Area Treated

Algeria 150 ha (7-12 July)



Desert Locust Situation and Forecast

(see also the summary on page 1)

WESTERN REGION

Mauritania

• SITUATION

No surveys were carried out and no locusts were reported during July.

• FORECAST

Low numbers of adults are likely to be present in the two Hodhs, Tagant, Brakna, Assaba, Trarza and southern Adrar where small-scale breeding will occur in areas of recent rainfall. Consequently, locust numbers will increase but should remain below threatening levels during the forecast period.

Mali

• SITUATION

Although no surveys were carried out during July, unconfirmed reports continued to be received from nomads of important populations in the Tilemsi Valley west and south of Tessalit (2011N0102E) at In Abser (2015N/0033E), In Checker (1943N/0015E) and Nmadaden (1850N/0045E).

• FORECAST

Low numbers of adults are likely to be present in the Adrar des Iforas, Tilemsi Valley, Timetrine and, perhaps, Tamesna. Small-scale breeding is probably in progress in those areas that recently received rainfall. Consequently, locust numbers will increase during the forecast period.

Niger

• SITUATION

During July, scattered adults persisted in a few farms near Arlit (1843N/0721E) where they were becoming mature. Scattered hoppers, fledglings and adults, at densities of up to 500 per ha, were present at several places in the Tadress near Agadez (1700N/0756E). A few isolated adults were seen in the west near Tillaberi (1428N/0127E). Reports of locusts in the oases of Fachi and Bilma during June have not been confirmed so far.

• FORECAST

Small-scale breeding will continue in areas of recent rainfall in the Air and Tamesna and may extend to the Tillaberi region. Consequently, locust numbers will gradually increase during the forecast period.

Chad

• SITUATION

Isolated mature adults, at densities of up to 15 adults per ha, were seen at four locations between Abeche (1349N/2049E) and Fada (1714N/2132E) during a survey conducted in the northeast from 19 June to 4 July.

• FORECAST

Locust numbers will increase slightly in Biltine and Ennedi due to small-scale breeding during the forecast period.

Senegal

• SITUATION

No locusts were reported during July.

• FORECAST

No significant developments are likely.

Algeria

• SITUATION

During July, no locusts were seen in the area west of Tamanrasset where control operations were carried out against adults in June. On the other hand,

new hopper and adult infestations were found to the southwest near the Malian border at two locations in Oued In Ameles (2035N/0246E) during the first half of the month, suggesting that undetected breeding occurred in May. Control operations treated 150 ha of third to fifth instar hopper groups, at densities of up to 20 hoppers per sq. m., and dense groups of immature adults on 7 and 12 July.

• FORECAST

Low numbers of adults may be present in the extreme south adjacent to the Malian border and the Adrar des Iforas. There is a possibility of small-scale breeding in some of these areas during the forecast period.

Morocco

• SITUATION

No surveys were carried out and no locusts were reported during July.

• FORECAST

No significant developments are likely.

Libyan Arab Jamahiriya

• SITUATION

No reports received.

• FORECAST

No significant developments are likely.

Tunisia

• 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.

CENTRAL REGION

Sudan

• SITUATION

Scattered immature and mature locusts were reported in 24 locations in Northern Kordofan north of El Obeid (1311N/3010E) during July.

• FORECAST

Small-scale breeding will occur in Northern Darfur, Northern Kordofan and near Kassala, causing locust numbers to increase but remain below threatening



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levels. By the end of the forecast period, new adults are likely to appear in these areas.

Eritrea

• SITUATION

No locusts were seen during surveys carried out on the central Red Sea coastal plains on 17-18 July.

• FORECAST

Low numbers of locusts may be present in the Western Lowlands where small-scale breeding is likely to occur during the forecast period. Surveys are recommended to clarify the situation.

Somalia

• SITUATION

No locusts were seen during surveys carried out on the plateau between Hargeisa (0931N/4402E) and Boroma (0956N/4313E) and on the coastal plains between Berbera (1028N/4502E) and the Djibouti border during the first week of July.

• FORECAST

No significant developments are likely.

Ethiopia

• SITUATION

No surveys were carried out and no locusts were reported during July.

• FORECAST

No significant developments are likely.

Djibouti

• SITUATION

No surveys were carried out and no locusts were reported during July.

• FORECAST

No significant developments are likely.

Egypt

• SITUATION

During July, scattered mature Desert Locust adults mixed with African Migratory Locusts, at densities up to 170 per ha, persisted at one farm near the Sudan border at Sh. Oweinat (2219N/2845E). No locusts were reported elsewhere in the Western Desert.

• FORECAST

Low numbers of locusts are likely to persist in agricultural areas near Sh. Oweinat and may increase slightly if additional breeding occurs. Nevertheless,

this does not pose a threat to neighbouring areas and no significant developments are likely.

Saudi Arabia

• SITUATION

No locusts were seen during surveys carried out in the interior on 7 July at Al Badi, and on the Red Sea coastal plains near Jeddah and between Qunfidah and Jizan on the 12-16th.

• FORECAST

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

Yemen

• SITUATION

No locusts were seen during surveys carried out in the summer breeding areas of the interior between Marib and Sayun on 12-17 July.

• FORECAST

There is slight possibility of isolated adults in areas of recent rainfall on the Red Sea coast and in the interior near Marib where small-scale breeding could occur. Regular surveys should be carried out to monitor the situation.

Oman

• SITUATION

No reports received.

• FORECAST

No significant developments are likely.

Bahrain, Iraq, Israel, Jordan, Kenya, Kuwait, Qatar, Syria Arab Republic, Tanzania, Turkey, UAE and Uganda

• FORECAST

No significant developments are likely.

EASTERN REGION

Iran

• SITUATION

No reports received.

• FORECAST

No significant developments are likely.

Pakistan

• SITUATION

During the last half of June, isolated mature adults were reported in crops near Meerani (2607N/6625E) in Lasbela district west of Karachi.

During July, isolated mature adults were present at densities up to 8 per ha in a few places of Lasbela, Tharparkar and Cholistan.

• FORECAST

Small-scale breeding will occur in Tharparkar and Cholistan. Consequently, locust numbers will increase

but should remain below threatening levels during the forecast period.

India

• SITUATION

No locusts were reported in Rajasthan during the second half of June and the first half of July.

• FORECAST

Low numbers of locusts are likely to appear and breed on a small-scale in Rajasthan west of Jodhpur between Barmer, Jaisalmer and Bikaner. Consequently, locust numbers will increase but should remain below 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 all locust situation reports are sent to FAO HQ by the 28th 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 e-mail. After each survey or control operation, affected countries should send completed *FAO Desert Locust Survey and Control Forms* with a brief interpretation of the results by e-mail to ecl@fao.org.

Desert Locust Guidelines. The revised edition in English was issued in September 2001 and is now available from FAO. French and Arabic versions as well as a sixth guideline on safety and environmental precautions will be released this autumn. Please contact the Locust Group for more information.

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

www.fao.org/news/global/locusts/elocust.htm

Publications on the Internet. More reports of FAO locust-related meetings are available for downloading at www.fao.org/news/global/locusts/reports1.htm:

- CLCPANO: 24th (and final) session report (French)
- CLCPRO: 2nd session report (French)
- EMPRES/CR: Spray Equipment Evaluation (English)
- EMPRES/CR: 2002 Annual Report (English)
- EMPRES/CR and Central Region Commission: 2nd Joint Survey on the Egypt/Sudan border, January 2003 (English)
- SW Asia Commission: 9th Iran/Pakistan Joint Desert Locust Survey, 1-30 April 2003 (English)
- SPOT-VGT: form to be used in the field for validation of satellite vegetation imagery (English, Arabic)

Desert Locust research award. The FAO Commission for Controlling the Desert Locust in the Central Region (CRC) is pleased to announce a cash award for outstanding research on Desert Locust. For more details, please contact the CRC Office in Cairo (munir.butrous@fao.org).

Desert Locust Control Committee. A commemorative medal will be handed out at the upcoming 37th session of the FAO Desert Locust Control Committee (DLCC) to member countries (locust affected countries and donors) and regional organizations.

2003 events. The following are provisionally scheduled:

- **DLCC.** 37th Session, FAO Rome, 22-26 September
- **EMPRES/CR.** 11th Liaison Officers meeting, Djibouti, 12-16 October
- **EMPRES/WR.** 2nd Liaison Officers meeting, Agadir (Morocco), 8-13 December
- **Pesticide Referee Group.** 8th meeting, Rome, December (tba)



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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 km² • band: 1 - 25 m²

SMALL

- swarm: 1 - 10 km² • band: 25 - 2,500 m²

MEDIUM

- swarm: 10 - 100 km² • band: 2,500 m² - 10 ha

LARGE

- swarm: 100 - 500 km² • band: 10 - 50 ha

VERY LARGE

- swarm: 500+ km² • 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.

REGIONS

WESTERN

- locust-affected countries in West and North-West Africa: Algeria, Chad, Libya, Mali, Mauritania, Morocco, Senegal, Tunisia; during plagues only: Burkino Faso, Cape Verde, Gambia, Guidea Bissau and Guinea Conakry.

CENTRAL

- locust-affected countries along the Red Sea: Djibouti, Egypt, Eritrea, Ethiopia, Oman, Saudi Arabia, Somalia, Sudan, Yemen; during plagues only: Bahrain, Iraq, Israel, Jordan, Kenya, Kuwait, Qatar, Syria, Tanzania, Turkey, UAE and Uganda.

EASTERN

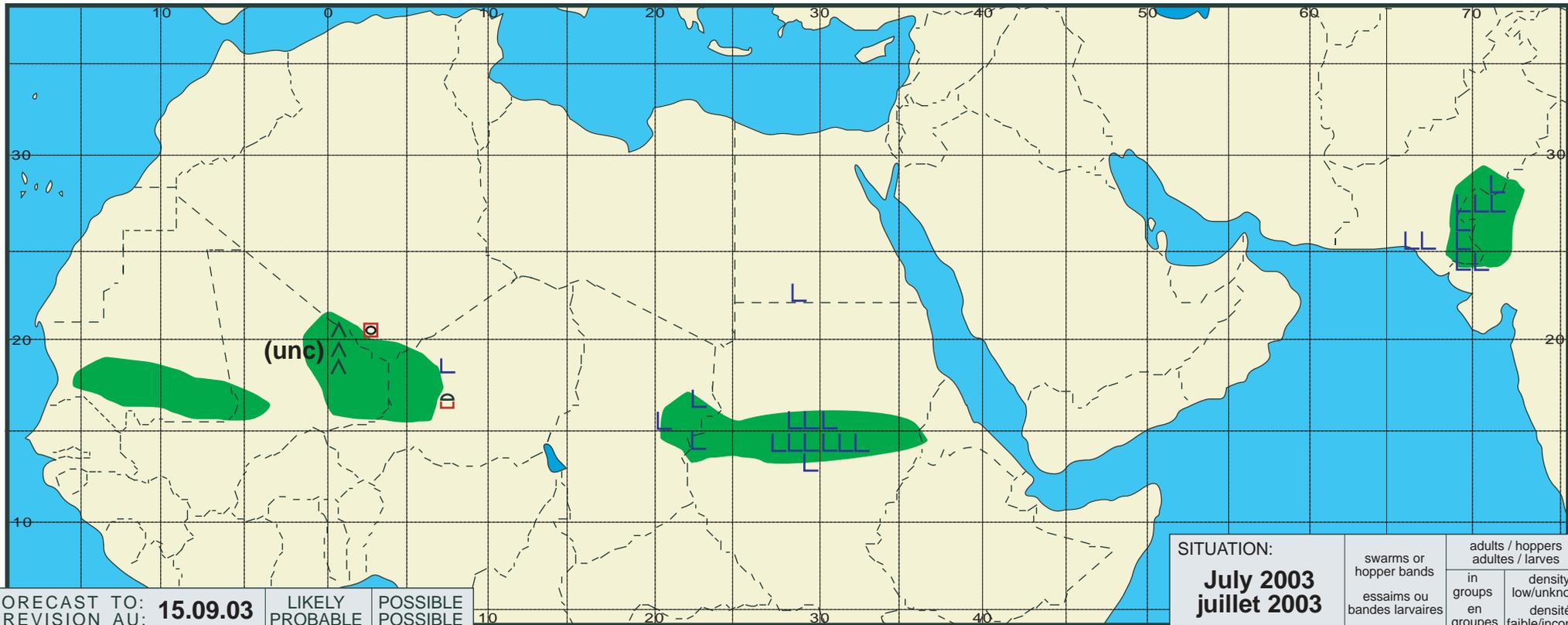
- locust-affected countries in South-West Asia: Afghanistan, India, Iran and Pakistan.



Desert Locust Summary

Criquet pèlerin - Situation résumée

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| FORECAST TO: PREVISION AU: 15.09.03 | LIKELY PROBABLE | POSSIBLE POSSIBLE |
|---|--------------------|----------------------|
| 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: July 2003 juillet 2003 | 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) | | | |

| | | | |
|---|--|--|--|
| 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) | | | |