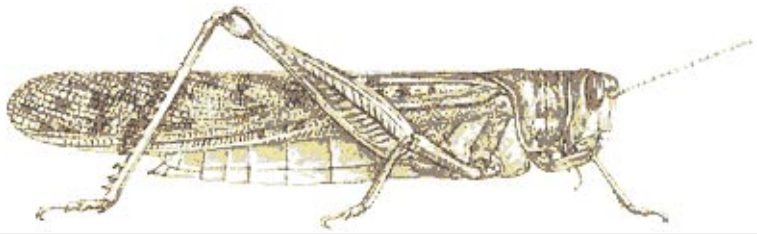

DESERT LOCUST BULLETIN

FAO Emergency Centre for Locust Operations

No. 285

(2 July 2002)

General Situation during June 2002
Forecast until mid-August 2002

The Desert Locust situation remained calm during June. A small infestation of hoppers and adults was treated in Morocco and only a few individual adults were reported on the Red Sea coastal plains in Saudi Arabia and along the Indo-Pakistan border. Summer rains began to fall in the southern parts of the Sahel in West Africa and Sudan. Small-scale breeding is expected to occur in those areas that receive additional rainfall during the forecast period. No significant developments are likely.

Western Region. A total of 20 ha of hoppers and adults were treated in southeastern **Morocco** during June. These probably originated from local breeding during the first three weeks of May by adults that may have come from northern Mali where there were unconfirmed reports of important populations during March and April. As conditions are rapidly drying out in Morocco, no significant developments are expected. Elsewhere, no locusts were reported and no surveys were conducted. Summer rains have recently started in the southern part of the Sahel but conditions are generally still dry and only starting to become green in some places. Small-scale breeding is expected to occur during the forecast period in southern **Mauritania**, northern **Mali** and **Niger** as the rains increase in these areas.

Central Region. No locusts were reported in the region during June. Summer rains started in the southern part of the locust breeding area in the interior of **Sudan** where conditions are improving and small-scale breeding is expected to occur during the forecast period. Good rains fell in eastern **Ethiopia**, northwestern **Somalia** and **Oman** where vegetation is green in some places but breeding is unlikely to occur because there are few, if any, locusts to take advantage of the conditions.

Eastern Region. Locust numbers declined in the spring breeding areas in western **Pakistan** and isolated adults appeared in the summer breeding areas along the Indo-Pakistan border. Similar numbers may be present in adjacent areas of Rajasthan, **India**, where breeding conditions are favourable. Small-scale breeding is expected to occur in both areas with the onset of the monsoon rains but no significant developments are likely.

The FAO Desert Locust 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 Locust and Other Migratory Pests Group, AGP Division, FAO, 00100 Rome, Italy. It is also available on the internet.
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DLIS: www.fao.org/news/global/locusts/locuhome.htm

No. 285

DESERT LOCUST BULLETIN

Weather and Ecological Conditions in June 2002

Summer rainfall commenced during June in the southern part of the Sahel in West Africa and Sudan but conditions remained dry and unfavourable for breeding. Although monsoon rains have not yet started along the Indo-Pakistan border, breeding conditions are favourable in Rajasthan, India due to late May rainfall.

In **West Africa**, the Inter-Tropical Convergence Zone (ITCZ) continued to move northwards during June, oscillating between 15-20N. At times, it temporarily surged as far north as 22N over northern Mali, Niger and Chad. Consequently, the first summer rains fell in the southern part of the Sahel. In Mauritania, light rain fell in areas of the south and southeast. In Mali, light rain was reported in the west and central parts of the country as well from the Adrar des Iforas to the Algerian border. In Niger, light rain fell in some areas of Tamesna and the southern and western parts of Air. In Chad, good rains fell along the northern edge of Lake Chad. With the exception of small localised patches of annual vegetation in parts of central Mauritania (southwest Tagant near El Khatt and Tamassoumit), northern Mali (Adrar des Iforas, Timetrine, Bouressa Basin) and Niger (interdunal areas in Tamesna), ecological conditions are still dry and only starting to become green in some areas. More rain is needed before they become suitable for locust breeding.

In **North-West Africa**, no significant rainfall was reported during June although light rains fell on the Algerian-Mali border at Bordj Bou Mokhtar on the 13-14th and again on the 23-24th. Some of the earlier rains may have extended further north into the central and southern Sahara in Algeria. Ecological conditions were reported to be dry or drying out throughout the region because of prevailing high temperatures.

In **Eastern Africa**, isolated showers were reported at times during June. In Sudan, rains fell over the southern portion of the summer breeding areas in Northern Darfur, Northern Kordofan and White Nile States during the first half of the month. Most of these were isolated light showers although widespread rains fell on the 12th. By the end of the month, rain-bearing clouds had reached as far north as El Fasher and El Obeid and green vegetation was present in Northern Kordofan up to about 1413N. Nevertheless, additional rainfall is required before conditions are favourable for locust breeding. During the first dekad of June, good rains fell in eastern Ethiopia where Jijiga reported 36 mm and Dire Dawa 15 mm. Some of these rains extended into adjacent areas of northwestern Somalia where light rains were reported between Hargeisa and Boroma and vegetation was green. By mid month, the short rains season (Belg) had come to an end in Ethiopia.

In the **Near East**, no significant rainfall was reported during June except in Oman. Widespread light to moderate showers fell on the 9-14th in coastal (Batinah) and interior (Dakhliya, Dhahira, and Sharkiya) areas of northern Oman where there were a few areas of green or greening vegetation from the rains that fell in May. In southern Oman, the monsoon (Khareef) season began on the Salalah coastal plains and Dhofar Hills. Light rains may have also fallen on the southern Red Sea coastal plains in Yemen on 1 June. Dry, hot and unfavourable conditions were reported in the interior and coastal areas of Saudi Arabia and Yemen.

In **South-West Asia**, there was little indication that the monsoon had reached the summer breeding areas along the Indo-Pakistan border in June despite early rains that fell in late May throughout Rajasthan, India. Nevertheless, conditions were reported to be favourable for breeding in Rajasthan by mid June. At the end of the month, significant cloud activity was present over the Tharparkar Desert in southeastern Pakistan and adjacent areas of Rajasthan, India where good rains may have fallen. Dry conditions were reported in the spring breeding areas of western Pakistan and southeastern Iran.

Area Treated

Morocco 20 ha (23-24 June)

Desert Locust Situation and Forecast

(see also the summary on page 1)

WEST AFRICA

Mauritania

• **SITUATION**

No locusts were reported and no surveys were carried out during the second half of May and first half

of June. No reports were received for the second half of June.

• **Forecast**

Low numbers of adults are likely to be present in the summer breeding areas of the two Hodhs, Tagant, Trarza and northern Brakna where small-scale breeding will occur during the forecast period. No significant developments are likely.

Mali

• **Situation**

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

• **Forecast**

Isolated adults may be present and will persist in parts of Timetrine and the Adrar des Iforas where vegetation remains green. Small-scale breeding will commence with the onset of the summer rains. No significant developments are likely.

Niger

• **Situation**

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

• **Forecast**

Isolated adults are likely to be present in a few places of Tamesna and near irrigated areas in Arlit. Small-scale breeding will commence with the onset of the summer rains. No significant developments are likely.

Chad

• **Situation**

No reports received.

• **Forecast**

No significant developments are likely.

Senegal

• **Situation**

No locusts were reported during June.

• **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 reports received.

• **Forecast**

No significant developments are likely.

Morocco

• **Situation**

Small infestations of fourth and fifth instar solitarious hoppers and fledglings at densities of up to 800 per ha were concentrated at three locations in Oued Draa between 2839N/0853W and 2923N/0725W during June. Ground control operations were carried out on the 23-24th in one of these areas where densities were 1-2 locusts per m^2, treating 15 ha at Ksar Chair (2908N/0758W) and 5 ha at Boulaadam (2907N/0802W).

• **Forecast**

Locust numbers will decline in Oued Draa and no significant developments are likely.

Libyan Arab Jamahiriya

• **Situation**

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

• **Forecast**

No significant developments are likely.

Tunisia

• **Situation**

No locusts were reported during June.

• **Forecast**

No significant developments are likely.

EASTERN AFRICA

Sudan

• **Situation**

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

• **Forecast**

Isolated adults are likely to present in Northern Kordofan, Northern Darfur and White Nile States where small-scale breeding will occur during the forecast period. No significant developments are likely.

Eritrea

• **Situation**

No reports received.

• **Forecast**

No significant developments are likely.

Somalia

• **Situation**

No locusts were seen during surveys on the

northwestern escarpment between Hargeisa and Boroma on 3-5 June.

• **Forecast**

No significant developments are likely.

Ethiopia

• **Situation**

No locusts were seen during surveys carried out near Dire Dawa and Jijiga on 13-18 June.

• **Forecast**

Although conditions may be favourable for breeding, the likelihood that locusts are present is very low and, consequently, no significant developments are expected.

Djibouti

• **Situation**

No locusts were reported during surveys near the Somali border between Holhol (1118N/4255E) and Ali Sabieh (1110N/4238E) during the first half of June.

• **Forecast**

No significant developments are likely.

Kenya, Tanzania and Uganda

• **Forecast**

No significant developments are likely.

NEAR EAST

Saudi Arabia

• **Situation**

Two solitary adults were seen near Lith (2010N/4015E) on 3 June. Elsewhere, no locusts were reported.

• **Forecast**

No significant developments are likely.

Yemen

• **Situation**

No locusts were seen along the Aden coastal plains on 30-31 May or in the interior desert between Wadi Hadhramaut and Marib on 8-10 June.

• **Forecast**

No significant developments are likely.

Egypt

• **Situation**

No reports received.

• **Forecast**

No significant developments are likely.

Kuwait

• **Situation**

No reports received.

• **Forecast**

No significant developments are likely.

Oman

• **Situation**

No locusts were reported in Musandam, Batinah, Dakhliya, Dhahira, and Sharkiya regions in the north during June.

• **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 reported in Kerman province on 23-24 June.

• **Forecast**

No significant developments are likely.

Pakistan

• **Situation**

During the second half of May, individual mature locust adults were seen in Baluchistan on the coast near Pasni at Rumra (2526N/6341E) and in the interior near Kharan at Naro (2822N/6532E) on 18 and 25 May respectively.

During the first half of June, individual immature and mature adults were first seen at three places in the summer breeding areas at Islamkot (2437N/7014E) in Tharparkar Desert, and at Sadewala (2753N/7056E) and Fazilwala (2755N/7058E) in Cholistan. A mature adult was also reported in Las Bela at Kandewari (2532N/6608E).

• **Forecast**

Low numbers of adults will persist in Tharparkar and Cholistan deserts and breed on a small scale with the onset of the monsoon rains.

India

• **SITUATION**

No locusts were reported during the second half of May and first half of June.

• **FORECAST**

Low numbers of adults are likely to be present in a few areas of Rajasthan where small-scale breeding will commence with the onset of the monsoon rains. No significant developments are likely.

Afghanistan

• **SITUATION**

No reports received.

• **FORECAST**

No significant developments are likely.

Other Locusts

Afghanistan. A mechanical and chemical emergency control campaign was organized against serious infestations of Moroccan Locust (*Dociostaurus maroccanus*) in Qunduz, Baghlan, Samangan, Balkh and Sar-i-Pol provinces in northern Afghanistan. Nearly 238,000 ha had been treated by mid June. Although some crop damage was reported, overall losses are not expected to exceed about seven percent. Given that widespread laying has already occurred in most areas, planning is underway for a well prepared preventive control campaign in 2003. FAO story:
www.fao.org/english/newsroom/news/2002/5000-en.html

Tanzania. An estimated 200 km^2 of Red Locust (*Nomadacris septemfasciata*) swarms, at densities of up to 50 or more locusts/m^2, were present in the Iku-Katavi, Wembere and Malagarasi outbreak areas in Western Tanzania during June. Aerial control operations against swarms are planned to commence by the end of July.

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 e-mail. Affected countries are encouraged to send completed *FAO Desert Locust Survey and Control Forms* with a brief interpretation of the results by e-mail to eclo@fao.org.

Desert Locust Guidelines. The revised edition in English was issued on 24 September 2001 and is now available from FAO. Please contact the Locust Group for more information.

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

Publications on the Internet. A list of publications that can be downloaded from the FAO Locust webpages is now available (www.fao.org/news/global/locusts/pubslist.htm). New additions are:

- Report of the 23rd session of the NW Africa Commission (CLCPANO) in French and Arabic
- Report of the 36th session of the DLCC recently held in Rome (English and French; Arabic upon request)
- FAO Desert Locust Guidelines, revised edition, 2001 (English)
- FAO Spray Monitoring Form (English)

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).

Upcoming events. The following are scheduled:

- **CLCPRO.** First Session, FAO Rome, 18-20 September
- **EMPRES/CR.** ULV sprayer evaluation workshop, Cairo (Egypt), 23-25 September
- **EMPRES/WR.** Improved locust control application techniques regional workshop, Nouakchott (Mauritania), 5-10 October
- **EMPRES/CR.** Training of trainers workshop, Oman, 7-17 October

- **EMPRES/CR.** 10th Liaison officers meeting, Jeddah (Saudi Arabia), 27-31 October
- **EMPRES/WR.** 1st Liaison officers meeting, Niamey (Niger), 15-19 December (tentative)
- **SW Asia Commission.** 23rd Session, Islamabad (Pakistan), 15-19 December

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
- 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

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FORECAST TO: PREVISION AU: **15.08.02**	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: **June 2002 juin 2002**	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	▲	△	⋀
egg laying or eggs pontes ou œufs	▼	▽	⋁
hoppers larves	●	○	◡
hoppers & adults (combined symbol example) larves et adultes (exemple symboles combinés)	◘	◙	⊍