

FAO Emergency Centre for Locust Operations



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General Situation during July 2002 Forecast until mid-September 2002

The Desert Locust situation remained calm during July. Rainfall was generally poor in the summer breeding areas of the Sahel in West Africa and along the Indo-Pakistan border. Only a few locusts were present in Pakistan. Good rains fell in Sudan where only isolated adults were seen in the summer breeding areas. Isolated adults were also reported in the Yemen interior. Although small-scale breeding is expected to occur during the forecast period in Sudan and in West Africa as well as along the Indo-Pakistan border if the rains improve, locust numbers will remain below threatening levels and no significant developments are likely.

Western Region. No locusts were reported in the region during July although low numbers of adults are probably present in a few areas of southeastern Mauritania and in northern Mali that received some rainfall. In late June, an additional 250 ha of late instar hoppers and fledglings were treated in southeastern Morocco. 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. A few individual locust adults were reported in the summer breeding areas in Sudan and Yemen during July. Good rains fell in the Sudan interior, especially in the Eastern Region, and ecological conditions are improving in many of the summer breeding areas in Northern Kordofan and Northern Darfur. Good rains also fell in northern Oman but there are few, if any, locusts to take advantage of these. Conditions are likely to be favourable for limited breeding on the southern Red Sea coast of Saudi Arabia. Light rains fell on the escarpment of northwestern Somalia and eastern Ethiopia but are not sufficient to create favourable conditions.

Eastern Region. Only very low numbers of locusts were present in the summer breeding areas along the Indo-Pakistan border in Pakistan because of poor rainfall associated with the monsoon. Similar numbers are probably present in adjacent areas of Rajasthan, India, where breeding conditions are more favourable. Small-scale breeding is expected to occur during the forecast period in both areas 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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Weather and Ecological Conditions in July 2002

Conditions remain drier than normal in most of the summer breeding areas in West Africa and along the Indo-Pakistan border because of erratic and poor rainfall. Good rains fell in Sudan where breeding conditions are likely to be better.

In West Africa, the Inter-Tropical Convergence Zone (ITCZ) oscillated between 10-17N during July. Temporary northerly surges to 26N over northern Mali and 22N over northern Niger that lasted for a day occurred several times during the month and caused showers to fall in northern Mali in the Adrar des Iforas and Timetrine, and in Air, Niger. Apart from these rare instances, very little rain fell in the summer breeding areas in the Sahel and conditions remained hot and dry except in the above areas where vegetation was becoming green. In Mauritania, light rain fell during the first dekad of July in Hodh El Chargui and Hodh El Gharbi and unusually heavy rains fell at Nema (90 mm) at the end of the month. Breeding conditions are probably favourable in the southeast but more rain is needed before they become suitable in the southern and southwestern Mauritania. In Chad, light rain fell in the northeast along the Sudan border but conditions are likely to be unfavourable unless more rain occurs.

In **North-West Africa**, no significant rainfall was reported during July south of the Atlas Mountains where conditions remained hot and dry. At the end of the month, moderate rains fell in the extreme south of Algeria along the Malian border at Bordj Moktar.

In Eastern Africa, unusually dry conditions prevailed in most areas except in parts of Sudan. Significant clouds were present in the Eastern Region near Kassala during many days in July and light rain was reported at intervals throughout the month. Clouds and light rains occurred at times in parts of Northern Kordofan and Northern Darfur. Breeding conditions are expected to be favourable near Kassala and improving in many areas west of the Nile River to the Chad border, mainly in the White Nile Province and along Wadi Milk. On the Red Sea coast, light rain fell on the plains south of Suakin, Sudan and clouds were present late in the month over the southern

plains in Eritrea. In Ethiopia, light rainfall was reported near Dire Dawa where conditions were becoming dry. In northwestern Somalia, light rains associated with the Kharan season fell near Hargeisa and surrounding areas on the escarpment.

In the Near East, no significant rainfall was reported during July except in Oman. During the second and third weeks of the month, light to heavy showers fell over a widespread area in the interior of northern Oman, stretching from Buraimi on the UAE border to the Sharkiya region in the northeast. Even though this area has received good rainfall every month since March, breeding conditions are less favourable due to prevailing high temperatures. Conditions are likely to be more favourable for breeding along the southern coastal plains of the Red Sea near Jizan, Saudi Arabia where moderate rains fell in late June. Significant clouds were present over the Red Sea coastal plains in Yemen during the last week of July. In the interior of Yemen, dry conditions persisted except between Ataq and Nisab where green vegetation was reported.

In **South-West Asia**, no significant rainfall was reported in the summer breeding areas along the Indo-Pakistan border during the first half of July. Consequently, breeding conditions were less favourable than normal except in some places in Rajasthan, India where good rains fell during the second half of June.



Area Treated

India

42 ha (1-15 July, mixed with grasshoppers)

Morocco 251 ha (26-27 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 June and first half of July.

• FORECAST

Low numbers of adults are likely to be present in the summer breeding areas of the two Hodhs where small-scale breeding could be in progress in areas of recent rainfall. Additional adults may appear and breed in Tagant, Trarza and northern Brakna if rains fall during the forecast period. No significant developments are likely.

Mali

SITUATION

Although no surveys were carried out during July, there were unconfirmed reports of scattered adults in the Adrar des Iforas on the 12th at Adrar Namel and on the 17th at Tin Aouanene.

• FORECAST

Scattered adults are likely to be present and breeding in areas of recent rainfall and the Adrar des Iforas. Small-scale breeding is expected to continue during the forecast period and locust numbers will gradually increase but remain below threatening levels.

Niger

• SITUATION

No locusts were seen during surveys carried out in the Air during July.

• FORECAST

Isolated adults are likely to be present in a few parts of Tamesna and in western Air. Small-scale breeding is expected to occur during the forecast period and locust numbers will gradually increase but remain below threatening levels. No significant developments are likely.

Chad

• SITUATION

No reports received.

• FORECAST

Isolated adults may be present in areas of recent rainfall in the northeast near Fada. Small-scale breeding could occur in these places if more rain falls during the forecast period. 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 reports received.

• FORECAST

No significant developments are likely.

Morocco

• SITUATION

A late report indicated that an additional 251 ha of fifth instar hoppers and fledglings were treated on 26-27 June in the same area in Oued Draa where control operations were carried out on 23-24 June.

• Forecast

No significant developments are likely.

Libyan Arab Jamahiriya

• SITUATION

No locusts were reported during July.

• Forecast

No significant developments are likely.

Tunisia

• SITUATION

No reports received.

Forecast

No significant developments are likely.

EASTERN AFRICA

Sudan

• SITUATION

A single immature adult was seen in White Nile Province at Shaa El Din on 22 July. No other locusts were seen during surveys carried out in Northern Kordofan and White Nile provinces on the 23-27th.

• 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 locusts were reported up to mid July.

• Forecast

No significant developments are likely.

Somalia

• SITUATION

No locusts were seen during surveys on the escarpment west of Hargeisa (0931N/4402E) on 9-11 July. A small group of fourth instar hoppers was seen at the Ministry of Agriculture nursery in Hargeisa on the 15th.



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• Forecast

No significant developments are likely.

Ethiopia

• SITUATION

No locusts were seen during surveys carried out near Dire Dawa on 16-18 July.

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 July.

• Forecast

A few isolated adults may be present and breeding near Jizan where good rains fell in late June. No significant developments are likely.

Yemen

• SITUATION

No locusts were seen during surveys in the interior of Hadhramaut and Shabwah on 23-25 July except for a single mature adult near Ataq at Thaouban (1436N/4631E) on the 23rd.

• 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, Dakhliya and Dhahira regions in the north during July.

• 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 and Hormozgan provinces on 6-7 July.

• FORECAST

No significant developments are likely.

Pakistan

• SITUATION

During the second half of June, a few isolated solitarious mature adults, up to 4 per ha, persisted in the summer breeding areas at seven places along the Indo-Pakistan border in Cholistan and Tharparkar deserts and at one place in the Las Bela valley west of Karachi

During the first half of July, the same populations were reported at eight places in Cholistan and Tharparkar.

• Forecast

Locusts will persist in Tharparkar and Cholistan deserts and breed on a small scale in areas of recent rainfall. Consequently, numbers will increase slightly but remain well below threatening levels.

India

• SITUATION

No locusts were reported during the second half of June.

During the first half of July, grasshoppers mixed with a few Desert Locust were present on crops at two locations in Rajasthan near Jalore at Sanchore (2445N/7146E) and Bhinmal (2500N/7215E) and at one location in Gujarat near Palanpur at Tharad (2424N/7138E). So far, 42 ha have been treated.

• FORECAST

Scattered adults are likely to be present and breeding on a small scale in a few areas of Rajasthan where monsoon rains have fallen. Consequently, numbers will increase slightly but remain well below threatening levels.

Afghanistan

• SITUATION

No reports received.

• FORECAST

No significant developments are likely.



Other Locusts

Afghanistan. The control campaign against a major outbreak of Moroccan Locust (*Dociostaurus maroccanus*) has been completed reasonably successfully given the difficult working conditions. Surveys are currently underway to establish where laying is occurring or has occurred in order to plan for early reaction in the spring of 2003. An international consultant retuns in August 2002 for two months to carry out training and to assist with planning next year's control campaign.

Tanzania. Funds have been approved by FAO's Technical Cooperation Programme and by Norway to carry out an emergency control campaign against Red Locust (*Nomadacris septemfasciata*) swarms in three outbreak areas. This will be followed up with hopper control in February/March 2003 including a large-scale application of *Metarhizium*.



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).

2002 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), 15-20 December
- SW Asia Commission. 23rd Session, Islamabad (Pakistan), 15-19 December



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2003 events. The following are provisionally scheduled:

- DLCC Technical Group. FAO Rome, 24-26 February
- **EMPRES.** 6th Consultative Committee and Phase III Planning Workshop, Cairo (Egypt), 24-28 March
- CRC. 24th Session of the Executive Committee, Beirut (Lebanon), 10-15 April
- CLCPANO. 24th Session, Tripoli (Libya), 4-8 May
- DLCC. 37th Session, FAO Rome, 22-26 September



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).

ADULT SWARM AND HOPPER BAND SIZES VERY SMALL

• swarm: less than 1 km² • band: 1 - 25 m²

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

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

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.

• 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.



