

FAO Emergency Centre for Locust Operations



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General Situation during December 2002 Forecast until mid-February 2003

The Desert Locust situation remained calm during December. Small-scale breeding continued in western Mauritania and insignificant numbers of adults were present in Morocco and Yemen. Although good rains fell in Morocco, they are expected to have little impact on the locust situation. During the forecast period, small-scale breeding is likely to occur along the Red Sea coasts of Yemen and Saudi Arabia and, if additional rains fall, on the coasts of Sudan and Eritrea as well as in northwestern Mauritania. Elsewhere, low numbers of locusts may persist in parts of northern Mali.

Western Region. Small-scale breeding continued in central and western Mauritania during December where low numbers of hoppers and adults were reported. A few adults were also seen in the Draa Valley in Morocco and in southern Algeria. Unless further rains fall in these areas, only low numbers of adults will persist in these areas. In northern Mali, scattered adults may be present in a few wadis where vegetation is still green. No locusts were reported elsewhere in the region.

Central Region. Isolated adults were reported at one place on the Red Sea coast in Yemen as well as on the coastal plains near Aden. Small-scale breeding is likely to occur during the forecast period on the Red Sea coast of Yemen and in adjacent areas near Jizan, Saudi Arabia where light rains fell during December. This will lead to a slight increase in locust numbers but they will remain well below threatening levels. If additional rains fall in the coming weeks, small-scale breeding could occur on the coastal plains and adjacent subcoastal areas in Sudan where adults may already be present and, to a lesser extent, in Eritrea. No locusts were reported elsewhere in the region.

Eastern Region. Although light rains fell in Baluchistan, **Pakistan** and in Rajasthan, **India**, breeding conditions remained unfavourable and no locusts were reported in the region. No significant developments are likely during the forecast period.

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 November 2002

Good rains fell during December in Morocco and in some places along the Red Sea coastal plains where conditions are favourable for breeding. Although conditions were becoming unfavourable in northwestern Mauritania, northern Mali and southern Algeria, there may be sufficient vegetation to allow low numbers of locusts to survive.

In the Western Region, good rains fell during December in northwestern and southern Morocco. extending at times to western Algeria. These rains were associated with several depressions that originated in the Atlantic Ocean and moved eastward across the Mediterranean on the 10-13th, the 18th and on the 27th. Heavy rains fell in the Souss Valley (154 mm at Taroudant, 121 at Agadir) and along the southern side of the Atlas Mountains (141 mm at Ouarzazate). Rainfall was lighter in the Draa Valley and on the coast between Sidi Ifni and Dakhla. Most of the rain fell during the second week when light showers fell as far south as Dakhla and east to Samara and Tindouf. Consequently, vegetation is green or becoming green in most of these areas. On 10 December, light rains also fell in southern Mauritania from Aioun El Atrous south to Nioro du Sahel, Mali. On the 12th, the Inter-Tropical Convergence Zone (ITCZ) reached as far north as 25N over northeastern Niger but no rainfall was reported or is thought to have occurred. Although vegetation was becoming dry, conditions remained favourable for Desert Locust survival in parts of Inchiri in northwestern Mauritania, in a few wadis in the Adrar des Iforas in northern Mali and near Tamanrasset in southern Algeria.

In the **Central Region**, light to moderate rains fell along parts of the Red Sea coast in Eritrea near Massawa and in Saudi Arabia near Jizan during the third week of December. Light to moderate rains also fell several times on the Red Sea coast of Yemen between Bayt Al Faqih and the Saudi border. Consequently, conditions are expected to be favourable for small-scale breeding in these areas. Light rainfall also occurred in eastern Ethiopia near

Dire Dawa and in northwestern Somalia near Boroma, but vegetation was reported to be drying out in these places. In Djibouti, light rain fell in the capital in the 26th and 29th. No rainfall was reported on the Red Sea coast in Sudan and Egypt.

In the **Eastern Region**, isolated showers fell in some places along the coast and in the interior of Baluchistan in western Pakistan during the second half of December. Similar showers were reported in parts of Rajasthan, India between Jodhpur, Jaisalmer and Bikaner at the end of the month. Despite this rainfall, temperatures remained low and conditions were unfavourable for locust survival or breeding in both areas.



Area Treated

No control operations were reported during December.



(see also the summary on page 1)

WESTERN REGION

Mauritania

SITUATION

Although breeding declined during the first two decades of December in the Takhça region near Moudjeria (1751N/1228W), a few individual hoppers of all instars mixed with isolated immature and mature adults persisted in this area during the remainder of the month. Small-scale breeding continued to the northeast, northwest and south of Moudjeria, and near Akjoujt (1945N/1421W) where isolated hoppers, fledglings and adults were present.

• FORECAST

Small-scale breeding will continue between Moudjeria and Akjoujt, and perhaps extend further north in Inchiri, if additional rains fall during the forecast period. Otherwise, breeding will decline in these areas. Locust maturation is likely to be delayed due to low temperatures.

Mali

SITUATION

A report was received with information up to 3 December but further details are awaited.

• FORECAST

Low numbers of solitarious adults are likely to persist in a few places in the Timetrine, Tilemsi Valley and the Adrar des Iforas.

Niger

SITUATION

In early November, scattered immature and mature adults mixed with isolated first instar hoppers were reported on the Talak plains northeast of Arlit near Agaliouk (1846N/0732E). Ground control operations treated 435 ha, and, by the 21st, scattered adults at densities of 200 per ha and solitarious and transiens hoppers at densities of 10 per bush remained. Nearby, solitarious adults, up to 1,000 per ha, were reported as well as a few fourth instar hoppers. Elsewhere, an individual immature adult was seen on the 8th east of Agadez (1700N/0756E) in southeastern Air. A single hopper and adult were also seen in Tamesna north of In Abangharit (1754N/0559E) on the 22nd.

• FORECAST

Locust numbers will decline in Tamesna and in western Air as vegetation dries out and breeding conditions become unfavourable. Nevertheless, low numbers may persist in a few places near Talak. 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.

Algeria

• SITUATION

A few immature adults were present in wadis near Tamanrasset (2250N/0528E) during December.

• FORECAST

Low numbers of adults are likely to persist near Tamanrasset and small-scale breeding could occur if rains fall during the forecast period.

Morocco

• SITUATION

Three individual immature adults were seen near Guelmim at Msied (2801N/1049W) on 26 December. No locusts were seen during surveys carried out in adjacent areas near Tan-Tan.

• FORECAST

Low numbers of adults are expected to slowly mature and eventually breed on a limited scale in some places along Wadi Draa and in adjacent areas on the coast.

Libyan Arab Jamahiriya

SITUATION

No locusts were reported during December.

Forecast

No significant developments are likely.

Tunisia

SITUATION

No locusts were reported during December.

• 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

No locusts were reported during December.

Forecast

Small-scale breeding is likely to be in progress on the Red Sea coastal plains in areas that received good rainfall during November, primarily between Suakin and Tokar Delta and in the northern subcoastal areas in Wadi Oko/Diib. Consequently, locust numbers should increase during the forecast period but remain below threatening levels.

Eritrea

• SITUATION

No locusts were seen during surveys carried out on 22-23 December on the northern coast between Massawa (1537N/3928E) and the Sudanese border at Karora (1745N/3820E).

• Forecast

Isolated adults may be present in some areas along the Red Sea coastal plains between Massawa and Karora. Small-scale breeding could occur in areas of recent rainfall and lead to a gradual increase in locust numbers.

Somalia

• SITUATION

No locusts were seen during surveys carried out on the northwestern coastal plains near Berbera (1028N/4502E) and on the escarpment Hargeisa



No. 291



(0931N/4402E) and Boroma (0956N/4313E) on 10-12 December.

Forecast

No significant developments are likely.

Ethiopia

SITUATION

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

Forecast

No significant developments are likely.

Djibouti

• SITUATION

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

• Forecast

No significant developments are likely.

Egypt

SITUATION

No locusts were reported during December along the Red Sea coast or in the Western Desert.

Forecast

No significant developments are likely.

Saudi Arabia

SITUATION

No locusts were reported during November and December.

• Forecast

Scattered adults are likely to be present in areas of recent rainfall along the Red Sea coastal plains near Jizan where small-scale breeding is expected during the forecast period.

Yemen

SITUATION

An isolated mature adult was seen on the Red Sea coastal plains south of Hodeidah at Khabt Majbol (1441N/4312E) on 12 December. Isolated mature adults were seen on the 31st on the coastal plains northwest of Aden in areas where breeding had occurred during October.

Forecast

Locust numbers will continue to decline on the Gulf of Aden coastal plains as vegetation becomes dry. Small-scale breeding is expected to occur during the forecast period along parts of the Red Sea coastal plains. Regular monitoring of these areas is recommended.

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 locusts were seen during surveys carried out in Hormozgan and Kerman provinces on 23-24 December.

Forecast

No significant developments are likely.

Pakistan

SITUATION

No locusts were reported during December.

• FORECAST

No significant developments are likely.

India

• SITUATION

No locusts were reported during the second half of November and in December.

• 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 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 eclo@fao.org.

<u>Desert Locust Guidelines</u>. 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 (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).

Master Trainer Course. Details and photos of a FAO training-of-trainers course on Desert Locust survey, control and training skills recently held in Oman are available at:

www.fao.org/news/global/locusts/omntot/totmain.htm

2003 events. The following are provisionally scheduled:

- EMPRES/WR. 1st Liaison Officers meeting, Niamey (Niger), 30 January – 3 February
- EMPRES. 6th Consultative Committee and Phase III Planning Workshop, Luxor (Egypt), May
- CRC. 24th Session of the Executive Committee, Beirut (Lebanon), 10-15 April
- CLCPANO. Extraordinary Session, Alger (Algeria), 4-5 June
- · CLCPRO. 2nd Session, Alger (Algeria), 7-11 June
- DLCC. 37th Session, FAO Rome, 22-26 September

- EMPRES/CR. 11th Liaison Officers meeting, Djibouti (or Egypt), December
- DLCC Technical Group. FAO Rome, to be advised



No. 291





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
 small

• 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.

• 21 - 50 mm of rainfall.

· 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.





