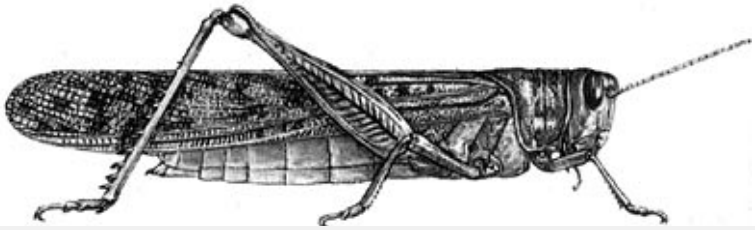

DESERT LOCUST BULLETIN

FAO Emergency Centre for Locust Operations **No. 297**

(2 July 2003)

General Situation during June 2003 Forecast until mid-August 2003

The Desert Locust situation was generally calm during June. Most of the activity was concentrated in the Western Region where seasonal rains began in the summer breeding areas in the Sahel and ecological conditions were improving. Adult groups were treated in southern Algeria, while other hopper and adult groups were reported in northern Libya. Low numbers of adults were present in northern Mali and Niger. In the Eastern Region, monsoon rains reached the summer breeding areas along the Indo-Pakistan border but no locusts have been reported so far. Small-scale breeding is expected during the forecast period in West Africa, Sudan, and along the Indo-Pakistan border. Surveys are recommended to monitor the situation on a regular basis during the summer.

Western Region. Ground control operations were carried out in late May and early June against adults, some forming groups, in southern **Algeria** where similar operations were conducted in mid April against hopper groups. There was an unusual report of hoppers and adults forming groups in northern **Libya** and an unconfirmed report of locusts at two oases in eastern **Niger**. Desert Locusts are rarely seen in these places during recessions. Low numbers of adults were present in northern **Mali** and in the Air, Niger. These reports suggest that breeding in southern Algeria may have been more widespread than previously indicated and that some adults could have moved into surrounding areas. Summer rains have started in southern **Mauritania**, northern Mali, Niger and perhaps in northern **Chad**. During the forecast period, small-scale breeding is expected to occur in these areas and locust numbers will gradually increase but should remain below threatening levels.

Central Region. No locusts were reported in the region during June except for a few Desert Locust mixed with African Migratory Locust that persisted in an agricultural scheme in southern **Egypt**. Good rains fell in parts of the interior in **Sudan** where conditions have become favourable for breeding in some places. Sporadic showers were reported in a few areas in northern **Somalia**, eastern **Ethiopia**, **Oman**, and perhaps on the Red Sea coast between Jizan, **Saudi Arabia** and **Yemen**. During the forecast period, small-scale breeding is expected to occur in Sudan.

Eastern Region. No locusts were reported in the region. Monsoon rains reached Rajasthan, **India** by mid June and, consequently, ecological conditions were improving in many areas. During the forecast period, adults are likely to appear along the **Indo-Pakistan** border and breed on a small scale.

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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DLIS: www.fao.org/news/global/locusts/locuhome.htm

No. 297

DESERT LOCUST BULLETIN

Weather & Ecological Conditions in June 2003

Seasonal rains began to fall in most of the summer breeding areas from Mauritania to Sudan during June. Consequently, ecological conditions are improving in many of these places. Monsoon rains reached the summer breeding areas in Rajasthan, India where conditions are also improving.

In the **Western Region**, the Inter-Tropical Convergence Zone (ITCZ) oscillated between 12N and 18N during June with periodic surges to 20-22N over northern Mali and Niger. As a result, good rains were reported from southeastern Mauritania (the two Hodhs) during the first half of June, followed by light to moderate showers in the central portions of the south (Brakna, Assaba, Tagant) as well as in the southeast during the last week of the month. Good rains also fell at times during the month in northern Mali (the Adrar des Iforas and Tamesna), northern Niger (Tadress and the Air) and southern Algeria (near the Hoggar Mountains between Tamanrasset and Djanet). Some rain may have also fallen in early June in northern Chad (Tibesti and Ennedi). Enough rain is likely to have occurred in many of these places to allow breeding to commence.

In the **Central Region**, rains were sporadic during June. Showers were reported in parts of the summer breeding areas of Sudan, primarily in the southern portion of Northern Kordofan, the western area of Northern Darfur and near Kassala in the Eastern Region. Although there were reports of moderate to heavy rainfall at El Obeid, these could not be confirmed by analysis of satellite cloud imagery. Nevertheless, breeding conditions are likely to improve in many of these areas. Light rain may have fallen in a few places along the Red Sea coastal plains between Jizan, Saudi Arabia and Yemen during the last week of the month. Light to moderate rain fell at times in eastern Ethiopia between Dire Dawa and Jijiga, extending to parts of the northern Somali plateau where vegetation was starting to dry out in some places. Conditions were hot and dry on the coastal plains from Eritrea to northern Somalia. In Oman, light rain fell in some places in the northern interior and the monsoon rains continued in the south of the country in the Dhofar Region.

In the **Eastern Region**, seasonal rains associated with the monsoon reached Rajasthan, India in mid June. Light to moderate showers were reported from Jodhpur and Bikaner. Light pre-monsoon rains occurred in some adjacent areas of Tharparkar and Cholistan, Pakistan. Consequently, breeding conditions are likely to be improving in many of these areas.

Area Treated

Algeria 807 ha (25 May – 7 June)

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 June.

• **FORECAST**

Isolated adults are likely to be present between Aioun El Atrous and Nema. Small-scale breeding is expected to commence in areas of recent rainfall. No significant developments are likely.

Mali

• **SITUATION**

Although no surveys were carried out during June, there were unconfirmed reports from travelers of isolated mature adults in the southern Adrar des Iforas at Arkad (1738N/0022W) and near Aguelhoc (1927N/0052E). Nomads claimed that there were important adult populations further north near Tessalit (2011N0102E) at Amchach (2020N/0047E) and Bolrech (2046N/0107E) in June.

• **FORECAST**

Low numbers of adults will persist in the Adrar des Iforas and small-scale breeding will commence in areas of recent rainfall, including the Tilemsi Valley, Timetrine and the Tamesna. Consequently, locust numbers will gradually increase during the forecast period in these areas. Surveys are recommended to clarify and monitor the situation on a regular basis.

Niger

• **Situation**

Scattered adults were present and maturing during June in northwestern Air near Arlit (1843N/0721E), in the southern Air near Agadez (1700N/0756E) and further south in Tadress (1541N/0740E). There was an unconfirmed report of locusts in the oases of Fachi (1806N/1134E) and Bilma (1846N/1304E).

• **Forecast**

Small-scale breeding will occur in areas of recent rainfall in the Air and Tadress where locust numbers will gradually increase during the forecast period. Breeding may also occur in the Tamesna if rains fall. No significant developments are likely.

Chad

• **Situation**

No reports received.

• **Forecast**

Low numbers of locusts could appear and breed in areas where rain is thought to have recently occurred in Tibesti and Ennedi.

Senegal

• **Situation**

No locusts were reported during May and June.

• **Forecast**

No significant developments are likely.

Algeria

• **Situation**

During June, adult populations were present on acacia between Tamanrasset (2250N/0528E) and In Salah near Arak (2517N/0340E), and in farms west of Tamanrasset in the Abalissa region (2251N/0440E). This is the same general area where control operations were carried out in late March and early April against hopper groups. Control operations were again undertaken during the first week of June, treating 807 ha of immature and mature adults at densities of 40-100 per ha. Some of the infestations were forming groups. At one location, up to 150 adults were seen on a tree.

• **Forecast**

Low numbers of adults are likely to persist in areas of recent rain near Tamanrasset while others could appear further east towards Djanet where rains may have fallen during June. There is a slight 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 June.

• **Forecast**

No significant developments are likely.

Libyan Arab Jamahiriya

• **Situation**

Hoppers of all instars at densities of 2-5 hoppers per sq. m, fledglings and immature adults at densities up to 150 adults per ha were reported to be forming small groups on 19 June at five locations in Jebel Waddan, about 100 km north of Waddan (2910N/1610E), in the northern part of the country. This is an area where Desert Locust rarely occur during recessions. The total infested area was about 400 ha.

• **Forecast**

Locust numbers will decline near Waddan as natural vegetation dries out. Some of these may move south towards the summer breeding areas of the Sahel while others could appear in the southwest near Ghat. No significant developments are likely.

Tunisia

• **Situation**

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

• **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 seen during surveys carried out on 15-24 June on the western side of the Red Sea Hills between Kassala (1424N/3630E) and Sinkat (1855N/3648E), and in the Baiyuda Desert between Khartoum and Dongola (1910N/3027E).

• **Forecast**

Isolated adults are likely to appear and breed on a small scale in areas of recent rainfall in Northern Kordofan, Northern Darfur and Kassala. No significant developments are likely.

Eritrea

• **Situation**

No locusts were seen during surveys carried out on the Red Sea coast between Massawa (1537N/3928E) and Mehimet (1723N/3833E) on 18-19 June.

• **Forecast**

No significant developments are likely.

Somalia

• **Situation**

No locusts were seen during surveys carried out on the plateau between Hargeisa (0931N/4402E) and Erigavo (1040N/4720E) on 12-17 June.

• **Forecast**

No significant developments are likely.

Ethiopia

• **Situation**

No locusts were seen during surveys carried out on 19-20 June north of Jijiga (0922N/4250E).

• **Forecast**

No significant developments are likely.

Djibouti

• **Situation**

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

• **Forecast**

No significant developments are likely.

Egypt

• **Situation**

During June, scattered Desert Locust mixed with African Migratory Locusts persisted at two farms near the Sudan border at Sh. Oweinat (2219N/2845E) where hoppers, fledglings, immature and mature adults were reported on the 20th.

• **Forecast**

Locust numbers will continue increase slightly in agricultural areas near Sh. Oweinat because of small-scale breeding in irrigated crops. Nevertheless, this does not pose a threat to neighbouring areas and no significant developments are likely.

Saudi Arabia

• **Situation**

No locusts were reported on the Red Sea coastal plains along the foothills of the Asir Mountains between Jeddah and Khamis Mushait (1819N/4245E) and in the interior near Buraydah (2620N/4359E) during June

• **Forecast**

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

Yemen

• **Situation**

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

• **Forecast**

Isolated adults may be present in some interior areas of Al-Jawf and Shabwah. No significant developments are likely.

Oman

• **Situation**

No locusts were seen during surveys on the northern Batinah coast and the Musandam Peninsula during June.

• **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**

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

• **Forecast**

Low numbers of locusts are likely to appear and breed on a small-scale in parts of Cholistan and Tharparkar deserts once summer rains commence. No significant developments are likely.

India

• **Situation**

No locusts were reported in Rajasthan up to 18 June.

• **Forecast**

Low numbers of locusts are likely to appear and breed on a small-scale in those areas of Rajasthan that have received rainfall. 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.

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:

- 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).

Western Region Donor Meeting. The French Ministry of Foreign Affairs in collaboration with FAO is organizing a donors pledging meeting/roundtable in Paris on 29 July for support to the locust programme in the Western Region.

2003 events. The following are provisionally scheduled:

- **CRC.** 24th Executive Committee meeting, Beirut (Lebanon), 14-18 July
- **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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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

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

- 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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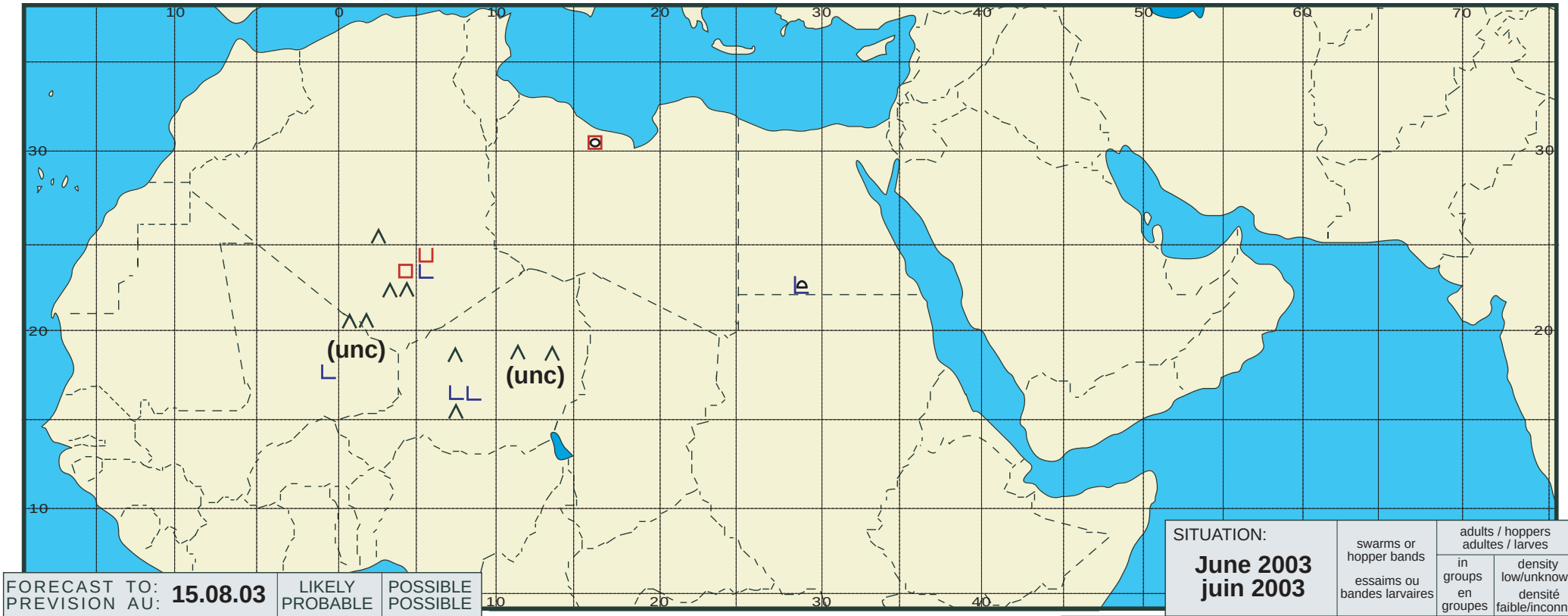

FORECAST TO: PREVISION AU: **15.08.03**	LIKELY PROBABLE	POSSIBLE POSSIBLE
favourable breeding conditions conditions favourables à la reproduction		
major swarm(s) essaim(s) important(s)		
minor swarm(s) essaim(s) limité(s)		
non swarming adults adultes non essaimant		

SITUATION:

June 2003
juin 2003

	swarms or hopper bands essaims ou bandes larvaires	adults / hoppers adultes / larves: in groups en groupes	adults / hoppers adultes / larves: 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)	◘	◙	⊍