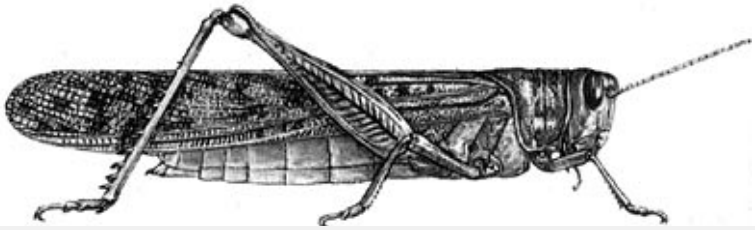

DESERT LOCUST BULLETIN

FAO Emergency Centre for Locust Operations **No. 293**

(4 March 2003)

General Situation during February 2003 Forecast until mid-April 2003

The Desert Locust situation remained calm during February. Small-scale breeding occurred near the Red Sea coast in Sudan. There were also unconfirmed reports of adults and hoppers in northern Mali. Breeding conditions were generally dry throughout the recession area because of poor rainfall. In South-West Asia, unprecedented rains occurred in southern Pakistan, including Baluchistan where small-scale breeding is expected during the forecast period.

Western Region. Very little rain fell in the region during February. Consequently, dry conditions prevailed except for localized areas of green vegetation in a few parts of northwestern **Mauritania**, northern **Mali**, **Niger** and central **Algeria**. No locusts were reported although there were unconfirmed sightings from travellers and nomads of locust adults and hoppers in northern Mali. No significant developments are expected.

Central Region. Small-scale breeding occurred near the Red Sea coast in northeastern **Sudan** where heavy rains fell in November and isolated hoppers and adults were present in a few wadis. Elsewhere, no locusts were reported in the region. Very little rain fell during February except for light showers along the Red Sea coast in **Yemen** as well as in the interior. Regular surveys should be conducted in these places during the forecast period. Poor rainfall in most of the winter breeding areas along both sides of the Red Sea has resulted in conditions becoming dry and further breeding is unlikely. No significant developments are expected.

Eastern Region. Unusually heavy and widespread showers fell for four days in southern **Pakistan**, extending to adjacent areas of **Iran**, **Afghanistan** and Rajasthan, **India**. As a result, conditions are expected to improve in the spring breeding areas along the coast and in the interior of Baluchistan in Iran and Pakistan. Although locusts have not been reported in Baluchistan, they are likely to be present or will appear and breed on a small scale from March onwards. Regular monitoring should continue in all of these areas 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 February 2003

Green vegetation persisted in a few areas in West and North-West Africa despite poor rainfall. Breeding conditions declined along the Red Sea coastal plains because of a lack of rain. Conditions will improve in the spring breeding areas in western Pakistan where unusually heavy rains fell, extending to Rajasthan, India and to parts of Iran and Afghanistan.

In the **Western Region**, very little rain was reported or is thought to have occurred in the locust breeding areas during February, the second consecutive month of poor rain. Light rain fell in northern Mauritania at Bir Moghrein early in the month. Some of this may have extended into neighbouring areas of southern Morocco. Isolated showers, associated with a frontal system over the Sahara, fell at mid-month in central and southern Algeria as far south as Timimoun on the Mali border. Light rains also fell at the end of the month along the Atlantic coast of Morocco near Sidi Ifni and Tan-tan. Because of these showers and rainfall during January, vegetation remained green in parts of southwestern Morocco, in the low-lying areas in Inchiri in northwestern Mauritania, north of the Hoggar Mountains in central Algeria, in a few places in Timetrine and the Adrar des Iforas in northern Mali, and in the southern Air in Niger. Elsewhere, conditions were unfavourable for breeding or for locust survival.

In the **Central Region**, no significant rainfall was reported in the region. In Sudan, vegetation remained green in the northern subcoastal areas near Tomala in Wadi Diib/Oko and in a few places on the coastal plains between Port Sudan and Tokar Delta from the heavy rains that fell in November 2002. Vegetation was also reported to be green in Tokar Delta where light rains occurred on 11 February. In Eritrea, vegetation was dry along the coastal plains from Tio to Karora except for a few places near Tio and Shieb. Poor rains this year have allowed only small areas to be cultivated near Shieb, Wekiro and Mehimet. In northern Somalia, green vegetation was present on the escarpment between Berbera and Hargeisa from rains that fell during December and January. Light rains fell on the Red Sea coastal plains near Hodeidah, Yemen during the last week of February. Good rains may have also fallen in the summer breeding areas during the same period, with floods being reported near Al-Jawf. Nevertheless, vegetation is drying out in the winter breeding areas along the coastal plains of Yemen and Saudi Arabia. In northern Oman, low to moderate rains fell in a few places along the coast and in adjacent areas of the interior, extending to adjacent parts of the UAE.

In the **Eastern Region**, unusually heavy rain fell over a large area of southern Pakistan and adjacent areas of southeastern Iran, southern Afghanistan and Rajasthan, India on 15-18 February. The showers were associated with a low-pressure system over southeastern Pakistan and were said to be the heaviest in 30 years. Hyderabad received 106 mm, surpassing the previous record of 37 mm. Good rains were reported throughout the spring breeding areas along the coast and in the interior of Baluchistan where conditions are likely to improve and become favourable for breeding during March. Although good rains fell in the summer breeding areas along the Indo-Pakistan border (Chhor 20 mm, Jaisalmer 28 mm, Bikaner 25 mm), these are less important because locusts are not present in these areas during the winter and spring.

Area Treated

No control operations were reported during February.

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 February.

• **FORECAST**

Isolated adults may be present in the northwest in Inchiri. No significant developments are likely.

Mali

• **SITUATION**

Although no surveys were undertaken during February, there were unconfirmed reports from travellers and nomads of locust adults and hoppers

west of Tessalit (2011N0102E) in the Tilemsi Valley and Timetrine in late January and throughout February.

• **Forecast**

As vegetation continues to dry out in the Timetrine, Tilemsi Valley and the Adrar des Iforas, locusts are likely to become concentrated and may form a few small groups. During periods of warm southerly winds, there is a low possibility that some adults could move north into southern Algeria.

Niger

• **Situation**

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

• **Forecast**

Isolated adults may be present in a few places near Talak and in southern Air. 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**

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

• **Forecast**

Isolated adults may be present near Tamanrasset where small-scale breeding could occur in areas of recent rainfall and as temperatures increase. These may be augmented by any adults arriving from northern Mali during periods of warm southerly winds.

Morocco

• **Situation**

No locusts were reported during February.

• **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**

Isolated late instar hoppers and immature adults were present at a few places in Wadi Oko on the western side of the northern Red Sea Hills near Tomala (2002N/3551E) and Gabatit (2020N/3547E) on 16-17 February. No locusts were seen during surveys carried out on the coastal plains between Mohamed Qol (2054N/3709E) and the Tokar Delta during February.

• **Forecast**

Locust numbers will decline on the Red Sea coastal plains and adjacent subcoastal areas of Wadi Oko/ Diib as vegetation dries out. Nevertheless, regular monitoring should continue in all of these areas during the forecast period.

Eritrea

• **Situation**

No locusts were seen during surveys carried out on the Red Sea coast between Mehimet (1723N/3833E) and Tio (1441N/4057E) on 19-25 February.

• **Forecast**

No significant developments are likely.

Somalia

• **Situation**

No locusts were seen during surveys carried out on the escarpment between Hargeisa (0931N/4402E) and Berbera (1028N/4502E) on 1-3 February.

• **Forecast**

No significant developments are likely.

Ethiopia

• **Situation**

No locusts were seen during surveys carried out between Dire Dawa (0935N/4150E) and Jijiga (0922N/

4250E) in February.

• **Forecast**

No significant developments are likely.

Djibouti

• **Situation**

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

• **Forecast**

No significant developments are likely.

Egypt

• **Situation**

No locusts were reported during the last week of January along the Red Sea coast or in the Western Desert.

• **Forecast**

No significant developments are likely.

Saudi Arabia

• **Situation**

No locusts were reported during February.

• **Forecast**

Isolated adults may be present on the Red Sea coastal plains near Jizan. Unless additional rains occur, locust numbers will decline as vegetation dries out. No significant developments are likely.

Yemen

• **Situation**

No locust surveys were carried out during February.

• **Forecast**

Isolated adults may be present in a few places on northern and central Red Sea coastal plains. Unless additional rains occur, locust numbers will decline as vegetation dries out. No significant developments are likely.

Oman

• **Situation**

No locusts were seen during surveys carried out in the northern interior (Dhahira) and on the Musandam Peninsula on 19-23 February.

• **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 Sistan-Baluchistan provinces on 17-18 February.

• **Forecast**

Isolated adults may be present or appear in areas of recent rainfall along the coast near Chabahar and in the interior near Bampur and Saravan. Regular monitoring should continue in all of these areas during the forecast period.

Pakistan

• **Situation**

No locusts were reported during January and the first half of February.

• **Forecast**

Isolated adults are almost certainly present in those places that received recent rainfall along the coast and in the interior of Baluchistan. Small-scale breeding is likely to occur from March onwards, causing locust numbers to increase but remain below threatening levels. Regular monitoring should continue in all of these areas during the forecast period.

India

• **Situation**

No locusts were reported during February.

• **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.

Desert Locust Guidelines. The revised edition in English was issued in September 2001 and is now available from FAO. French and Arabic versions will be released later this year. 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: 31st session of the Executive Committee (French, Arabic)
- CLCPRO: 1st session of the Western Region Commission (French)
- CRC: 23rd session and 2002-2003 workplans (English, Arabic)
- CRC/EMPRES/DLCO-EA: 1st and 2nd Technical Forums (English)
- EMPRES/CR: 9th and 10th Liaison Officers Meetings (English); 4th Consultative Committee (English)
- FAO: Expert Consultation and Risk Assessment on the Importation and Large-Scale Use of Mycopesticides against Locusts (English)
- SW Asia Commission: 23rd session (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 held in Oman in October 2002 are available at:

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

2003 events. The following are provisionally scheduled:

- **CRC.** 24th Session of the Executive Committee, Beirut (Lebanon), 10-15 April
- **EMPRES.** 6th Consultative Committee and Phase III Planning Workshop, Luxor (Egypt), 18-22 May
- **CLCPANO.** Extraordinary Session, Alger (Algeria), 7 June
- **CLCPRO.** 2nd Session, Alger (Algeria), 8-12 June
- **DLCC Technical Group.** FAO Rome, 18-20 June
- **DLCC.** 37th Session, FAO Rome, 22-26 September
- **EMPRES/CR.** 11th Liaison Officers meeting, Djibouti (or Egypt), 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

- 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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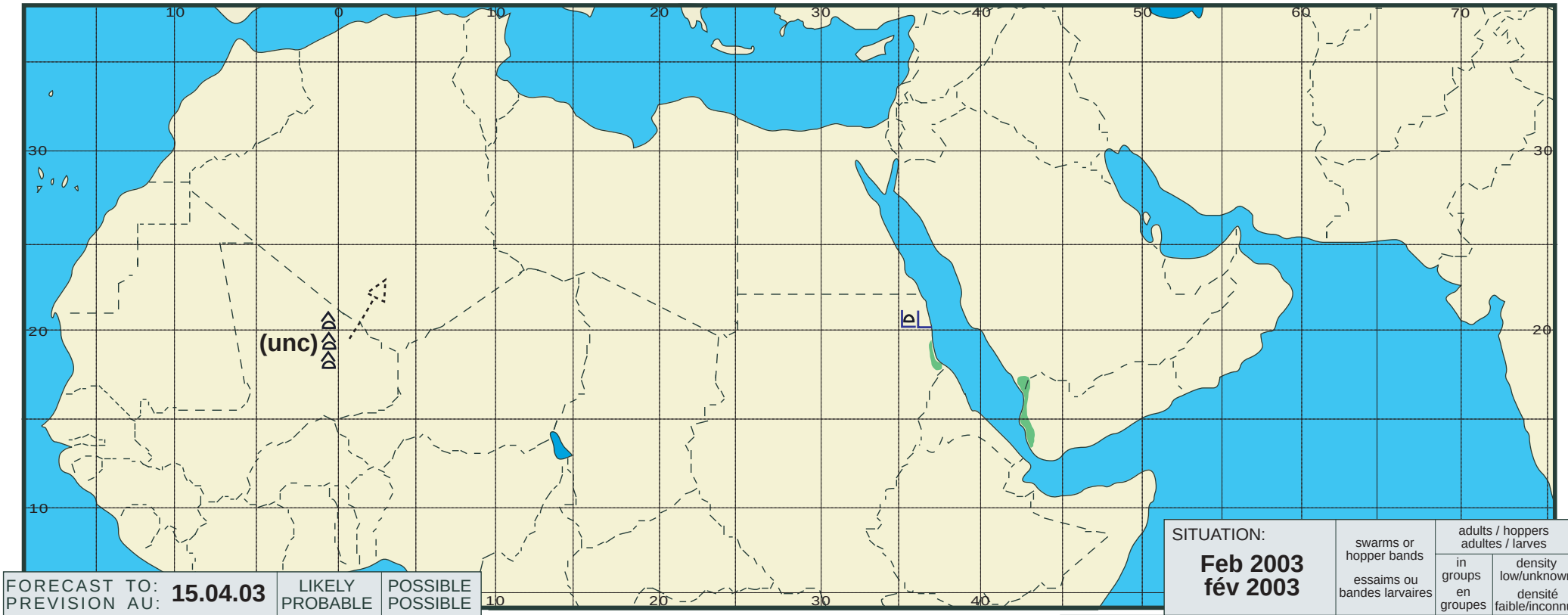

FORECAST TO: PREVISION AU: **15.04.03**	LIKELY PROBABLE	POSSIBLE POSSIBLE
favourable breeding conditions conditions favourables à la reproduction		
major swarm(s) essaim(s) important(s)		
minor swarm(s) essaim(s) limité(s)		
non swarming adults adultes non essaimant		

SITUATION: **Feb 2003 fév 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	◣	◺	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)	◘	◙	⊍