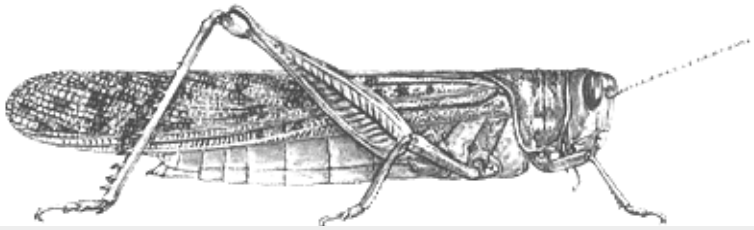


DESERT LOCUST BULLETIN

FAO Emergency Centre for Locust Operations

No. 271
(4 May 2001)

General Situation during April 2001
Forecast until mid-June 2001

The Desert Locust situation continued to remain calm during April. A few solitarious adults were present in north-western Libya, on the Red Sea coasts of Egypt and Saudi Arabia, and in the spring breeding areas of western Pakistan. Limited breeding could occur early in the forecast period in north-western Libya and perhaps western Pakistan but no significant developments are expected there or elsewhere in the recession area.

Western Region. No locusts were reported in the Region except for a few scattered adults in north-western **Libya** and an unconfirmed report from south-eastern **Mauritania**. Locust numbers are thought to be at an extremely low level due to the lack of winter rainfall and the persistence of dry conditions throughout the Region. It will take several generations of breeding before numbers increase to significant levels. This will require good rainfall during the summer that is well distributed throughout the breeding areas.

Central Region. Insignificant numbers of solitarious adults persisted at several places in south-eastern **Egypt** between the Red Sea coast and Lake Nasser. Similar populations were reported on the Red Sea coastal plains near Mecca, **Saudi Arabia**. No locusts were reported elsewhere in the Region and no significant developments are expected during the forecast period.

Eastern Region. Low numbers of solitarious adults were present in coastal and interior areas of Baluchistan in western **Pakistan**. Some of these areas received good rains which could allow late breeding to occur at a limited level. Nevertheless, the scale of the adult movement to the summer breeding areas along the Indo-Pakistan border is expected to be extremely small this year with, at most, only a few individual adults appearing by the onset of the monsoon rains. No locusts were reported in **Iran** or **India**.

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.
Telephone: +39 06 570.52420 (7 days/week, 24 hr)
Facsimile: +39 06 570.55271
E-mail: eclo@fao.org
Telex: 610181 FAO 1
Internet: http://www.fao.org/news/global/locusts/locuhome.htm

No. 271

DESERT LOCUST BULLETIN

Weather & Ecological Conditions in April 2001

Generally dry and unfavourable conditions continued to be reported in the recession area despite some isolated showers in a few places.

In **West Africa**, no rainfall was reported and dry conditions prevailed for the fifth consecutive month. In Mauritania, strong north-easterly winds gave rise to dust storms at times. Temperatures were unusually hot in early April, reaching 45°C, but returned to normal by the end of the month with minimum temperatures of 18-23°C and maximum temperatures of 30-42°C. Vegetation was dry throughout the north except for some small patches of drying vegetation in Inchiri near Akjoujt and Tijirit. Elsewhere in the Region, dry and unfavourable conditions persisted except in northern Mali where a few patches of drying vegetation may be present in the Adrar des Iforas.

In **North-West Africa**, conditions remained much the same during April as they were in the previous month throughout the Region. No significant rainfall was reported except for some traces along the Atlantic coast of Morocco between Agadir and Sidi Ifni and in the central Algerian Sahara near In Salah where isolated light rains fell on the 23rd. In Algeria, maximum temperatures reached 38°C and minimum temperatures were 9-25°C in the central Sahara. Prevailing winds in the south of the country were from the east and south-east. Dry vegetation and unfavourable breeding conditions were reported in Morocco and Algeria. Light rains fell in north-western Libya near Nalut at the beginning and end of the month where breeding conditions may be improving. The latter extended into parts of southern Tunisia.

In **Eastern Africa**, dry vegetation and unsuitable breeding conditions persisted throughout the Region except near Dire Dawa, Ethiopia where light rains fell and green vegetation was reported.

In the **Near East**, conditions were generally dry and not favourable for breeding throughout the Region. Although moderate rains were reported over most of the Red Sea coast of Egypt during the first week of April, vegetation continued to dry out. Light to moderate rains fell for the second consecutive month in the interior of Saudi Arabia but there are no indications that locusts were present to take advantage of the rain. In Yemen, vegetation was becoming green in a few places in the interior of Shabwah between Bayhan and Nisab where good rains fell in March.

In **South-West Asia**, isolated showers were reported in spring breeding areas of Baluchistan in western Pakistan where 50 mm fell on the coast at Pasni on 11-12 April and light rain fell several times in the interior at Khuzdar. Consequently, breeding conditions are likely to be favourable in a few localized areas. In India, light rain fell in Rajasthan at Jodhpur and Bikaner.

Area Treated

No control operations were reported.

Desert Locust Situation and Forecast

(see also the summary on the first page)

WEST AFRICA

Mauritania

• **SITUATION**

No locusts were seen during surveys carried out in Inchiri, Adrar and Tiris Zemmour, northern Mauritania on 11-20 April. In the south-east, there were two unconfirmed reports of locusts about mid month northwest of Nema where three groups of immature *transiens* adults were seen on trees between 1656N/0756W and 1650N/0749W and other adults were seen flying near 1709N/0801W. These may have originated from earlier infestations in northern Mali or perhaps they could be a species other than Desert Locust.

• **FORECAST**

A few isolated adults may be present in parts of Inchiri near Akjoujt and south-western Tijirit where vegetation is not completely dry. These may start to move towards summer breeding areas in the south where laying is expected with the onset of the rains. It is likely that the first generation of breeding will be difficult to detect due to the low numbers and dispersed nature of the parental population.

Mali

• **Situation**

No reports received.

• **Forecast**

Low numbers of adults are likely to be present and will persist in a few areas of Timetrine and the Adrar des Iforas. Limited breeding is expected to commence in these areas with the onset of the summer rains.

Niger

• **Situation**

No reports received.

• **Forecast**

A few isolated adults may be present in parts of the Air. Limited breeding is expected to commence in the Tamesna with the onset of the summer rains. No significant developments are expected.

Chad

• **Situation**

No reports received.

• **Forecast**

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 locusts were reported during April.

• **Forecast**

No significant developments are likely.

Morocco

• **Situation**

A few solitarious adults were seen in the north-east at Bourdime (3201N/0312W) during April.

• **Forecast**

No significant developments are likely.

Libyan Arab Jamahiriya

• **Situation**

Low densities of scattered mature adults were reported at four locations in the north-west of the country near Nalut (3153N/1059E).

• **Forecast**

Breeding on a limited scale may occur in areas of recent rainfall near Nalut early in the forecast period. No significant developments are likely.

Tunisia

• **Situation**

No reports received.

• **Forecast**

No significant developments are likely.

EASTERN AFRICA

Sudan

• **Situation**

No locusts were reported.

• **Forecast**

A few adults may appear in Northern Kordofan or Northern Darfur where limited breeding will commence with the onset of the summer rains. No significant developments are likely.

Eritrea

• **Situation**

No locusts were seen on the Red Sea coastal plains during April.

• **Forecast**

No significant developments are likely.

Somalia

• **Situation**

No reports received.

• **Forecast**

Low numbers of adults are likely to be present but will slowly decline in a few areas along the coast and on the escarpment as conditions dry out. No significant developments are likely.

Ethiopia

• **Situation**

No locusts were seen near Dire Dawa during surveys on 29-30 March.

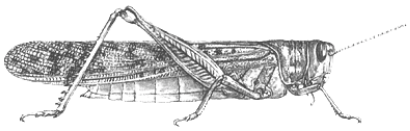
• **Forecast**

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**

A few isolated adults at densities of 5-100 locusts per ha were reported at two locations near Mecca in April.

• **Forecast**

Adult numbers will decline along the Red Sea coast as conditions dry out. Populations are not expected to have reached high enough levels on the Red Sea coast for migration to occur to the spring breeding areas of the interior where rains have fallen recently.

Yemen

• **Situation**

No locusts were seen during surveys undertaken on 16-22 April in the Shabwah interior of the south where heavy rains had previously fallen.

• **Forecast**

There is a slight possibility of a few locusts appearing in areas of green vegetation in Shabwah. No significant developments are likely.

Egypt

• **Situation**

During April, isolated immature adults were reported at five locations on the Red Sea coastal plains and in adjacent subcoastal areas west of Halaib (2212N/3635E). Similar populations were seen at four locations along the shores of Lake Nasser. No locusts were reported further north along the Red Sea coast or in the Western Desert.

• **Forecast**

Locusts will decline along the Red Sea coastal plains as vegetation dries out but a few may persist in agricultural areas in the Western Desert near Tushka and Sharq Oweinat. No significant developments are likely.

Kuwait

• **Situation**

No reports received.

• **Forecast**

No significant developments are likely.

Oman

• **Situation**

No locusts were seen during surveys on the Batinah coast of northern Oman in April.

• **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 seen during a joint survey in Sistan-Baluchistan province during the first half of April.

• **Forecast**

No significant developments are likely.

Pakistan

• **Situation**

During the first half of April, there was a slight increase in locusts reported in the interior of Baluchistan where maturing solitarious adults at densities of up to 3 per ha were present at nine locations. Similar populations were reported at six places along the coast and in sub-coastal areas.

• **Forecast**

There is a slight possibility that late breeding could occur on a limited scale in the spring breeding areas of Baluchistan near Pasni and Khuzdar where recent rains fell. Otherwise, locust numbers are expected to decline as conditions dry out. If breeding does not occur, the scale of the adult movement to the summer breeding areas along the Indo-Pakistan border is expected to be extremely limited this year with, at most, only a few individual adults appearing by the onset of the monsoon rains.

India

• **SITUATION**

No locusts were reported from 15 March to 20 April in Rajasthan and Gujarat.

• **FORECAST**

No significant developments are likely.

Afghanistan

• **SITUATION**

No reports received.

• **FORECAST**

No significant developments are likely.

Other Locust species

Afghanistan

An outbreak of locusts, most probably Moroccan Locust (*Dociostaurus maroccanus*), is in progress in the north where a recent Mission reported heavy infestations of third instar hoppers attacking wheat in Baghlan, Samangan and Kunduz provinces on 18-25 April. Local communities are trying to control these and other infestations. Earlier reports had suggested that about seven provinces in the north were affected by locusts. Control is often carried out mechanically in the country, by digging ditches and then directing hoppers into them. It appears that, under funding constraints, the system of monitoring egg beds and carrying out early control has broken down. A FAO/UNDP project is in the process of assessing the situation with a view to proposing further action.

Madagascar

A survey carried out along the south-western coastal plains on 13-19 April confirmed that more than 40,000 ha were still infested by *transiens* hopper and adult populations of the Malagasy Migratory Locust (*Locusta migratoria capito*) and need to be urgently treated. Hopper densities varied from 10-100 hoppers per sq. m in the four heaviest infested locations, and adult densities were between 10,000-15,000 adults per ha. The phase structure of the population was characteristic of the end of a major plague but this does not exclude the possibility of a resurgence in locust activity especially given that, for this time of year, the ecological conditions are unusually suitable for hopper development and breeding. It is expected that more hatching will occur during the first half of May and that adult groups will start to form from the end of May onwards unless control operations are quickly implemented.

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

NW Africa Regional Workshop. Pictures from a CLCPANO training workshop on locust survey and control recently held in Ghadames, Libya are available on the internet:

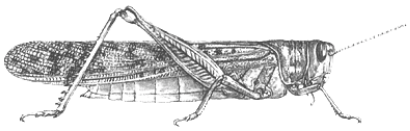
http://www.fao.org/news/global/locusts/clcpano/0103lib/0103lib.htm

Khartoum University. The Graduate College of the University of Khartoum is offering a one year postgraduate diploma course in Desert Locust Control which is expected to start in August 2001. Applications should be sent during May to: Registrar of the Graduate College, U. of K., POB 321, Khartoum, Sudan.

The Commission for Controlling the Desert Locust in North-West Africa. The 23rd Session will be held in Algiers, Algeria from 2-7 June 2001.

Desert Locust Control Committee. The 36th Session will be held in Rome from 24-28 September 2001.

Pesticide Referee Group. The 9th meeting will be held during the last quarter of 2001. Results of any field trials recently undertaken on the efficiency and human/environmental safety of control agents used against locusts and grasshoppers should be submitted to the Locust Group for transmission to the PRG.



Mr. Jama Geelle Muse. It is with deep regret that the sudden death of Mr. Jama Geelle Muse in Hargeisa, northern Somalia is announced. Mr. Muse was caretaker for DLCO-EA and had been working closely with the UNV Charles Mushi in carrying out locust surveys in northern Somalia. We would like to express our sincere condolences to his family, DLCO-EA and his government.

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

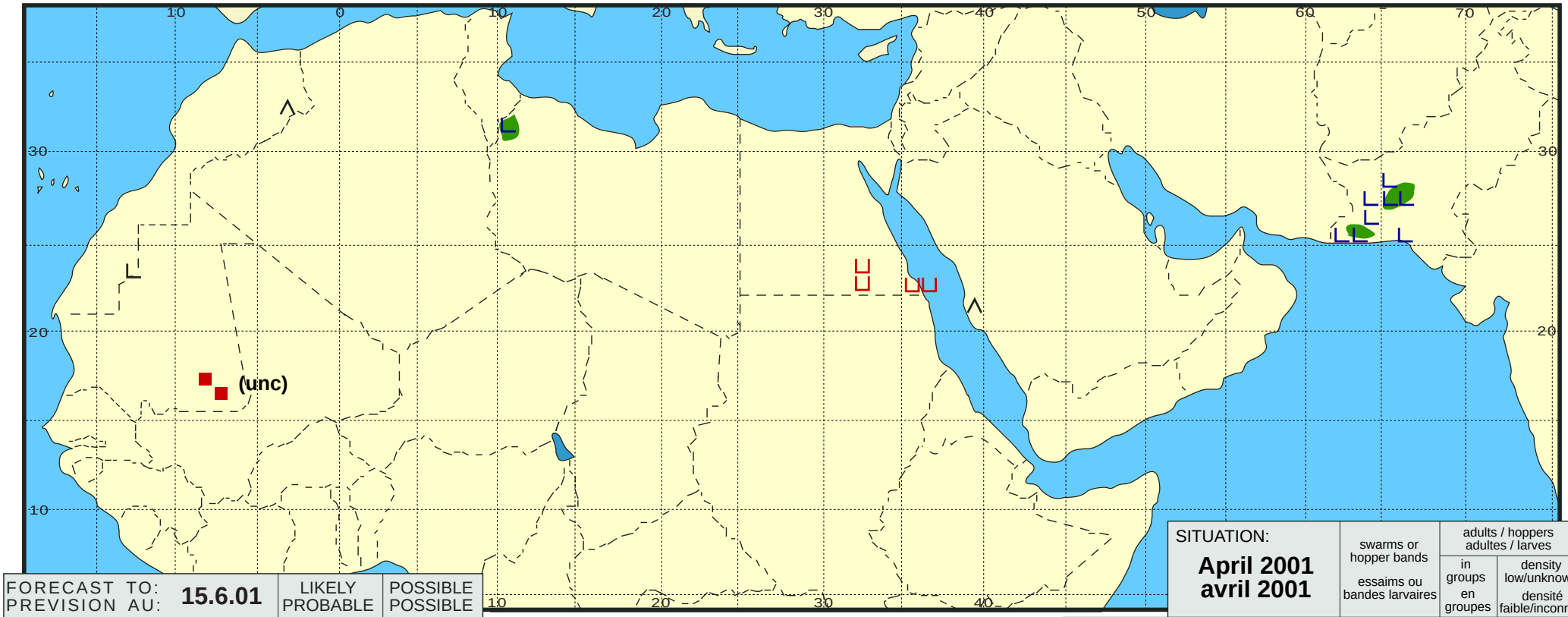
- period without widespread and heavy infestations by swarms.

REMISSION

- period of deep recession marked by the complete absence of gregarious populations.

Desert Locust Summary
Criquet pèlerin - Situation résumée

271



FORECAST TO: PREVISION AU: **15.6.01**	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: **April 2001 avril 2001**	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)	◘	◙	⊟