



DESERT LOCUST BULLETIN

FAO Emergency Centre for Locust Operations



No. 331

(2 May 2006)



General Situation during April 2006 Forecast until mid-June 2006

The Desert Locust situation remained calm during April. Small-scale breeding occurred in northwest Mauritania, near the Algerian border in Morocco, and in the eastern Sahara in Algeria. Low numbers of solitarious adults were present in parts of northern Mauritania and northern Mali. No locusts were reported in other regions where rainfall was poor and conditions were generally dry. During the forecast period, limited hatching will occur in Morocco and some breeding could take place in parts of northern Mauritania and Western Sahara. No significant developments are expected.

Western Region. Isolated solitarious adults were maturing in northern Mauritania during April, and small-scale breeding continued in a small area in the northwest. The situation may be similar in adjacent areas of Western Sahara. Unless further rainfall occurs, locusts will decline and start to move in May towards the summer breeding areas in southern Mauritania. Small-scale breeding is in progress in a limited area along the Algerian border in Morocco where hatching is likely in early May, giving rise to low numbers of solitarious hoppers that should fledge and become adults by mid-June. Local breeding also occurred in the eastern Sahara in Algeria where ground teams treated 20 ha of hoppers. A few isolated individual solitarious adults were reported on the Tamesna Plains in northeast Mali. Similar populations could be present in the Air Mountains in Niger.

Central Region. Although no locusts were reported in the region during April, there is a possibility of low numbers of solitarious adults on the Red Sea coastal plains in Yemen. As good rains fell early in the month over the southwestern part of the Arabian Peninsula, small-scale breeding could occur on the coast near the Yemen / Saudi Arabia border.

Eastern Region. No locusts were seen during a joint survey in the spring breeding areas in eastern Iran and western Pakistan in April. Although light rain fell at times, breeding conditions were generally unfavourable. By the end of the forecast period, a few isolated adults may start to appear in the summer breeding areas along the Indo-Pakistan border but no significant developments are expected.

The FAO Desert Bulletin is issued monthly, supplemented by Updates during periods of increased Desert Locust activity, and is distributed by 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 April 2006

Good rains fell over the southwestern part of the Arabian Peninsula in early April. Elsewhere in the recession area, ecological conditions remained generally unfavourable for breeding except for a few places in Northwest Africa.

In the **Western Region**, light to moderate rain fell in a few places at times during April. In northern Mauritania, moderate rainfall was reported in Tiris-Zemmour between Zouerate and Bir Moghreïn. Vegetation was green near Zouerate but dry elsewhere in the north as well as in the northwest (Dakhlet Nouadhibou and Inchiri). Mainly dry conditions persisted in the Algerian Sahara except in the east near In Amenas, Illizi and Djanet where vegetation was green in a few places. Dry conditions also prevailed in northern Mali and Niger except for a few isolated patches of green vegetation in the Adrar des Iforas between Aguelhoc and Kidal in Mali. In the spring breeding areas, light rain fell in a few places along the southern side of the Atlas Mountains in Morocco and Algeria, and in northwest Libya. Breeding conditions were improving in some areas, mainly in the Ziz and Ghrib Valleys in Morocco as well as along some wadis in the Western Sahara between Laayoune and Smara.

In the **Central Region**, light to moderate rains fell during the first decade of April over the Arabian Peninsula from the Red Sea coast of Yemen to the central interior of Yemen and Saudi Arabia. Rainfall was heaviest on the northern Tihama coast in Yemen and some flooding was reported between Al-Zuhra and the Saudi Arabian border. Light to moderate rain also fell at times during the first half of April in northern Oman, mainly along the Batinah coast and in the interior near UAE. In Eritrea, rain was reported on the coast near Massawa. Unfavourable breeding conditions prevailed along the Red Sea coast in Sudan and Egypt. Vegetation was drying out along the coast in Djibouti.

In the **Eastern Region**, showers fell at times during the first half of April in parts of the spring breeding areas in Baluchistan in eastern Iran and western



Area Treated

Algeria 20 ha (24 April)



Desert Locust Situation and Forecast

(see also the summary on page 1)

WESTERN REGION

Mauritania

• SITUATION

During the first decade of April, isolated first to fifth instar solitary hoppers were present at a few locations in the northwest about 60 km east of Nouadhibou (2054N/1701W). In the north, isolated immature and mature solitary adults were present between Zouerate (2244N/1221W) and Bir Moghreïn (2510N/1135W).

• FORECAST

Unless further rainfall occurs, locust numbers will decline in the northwest and north. Adults are expected gradually to move southwards and, by the end of the forecast period, they could start to appear in the summer breeding areas of the south.

Mali

• SITUATION

Isolated immature and mature solitary adults were seen at two places on the Tamesna Plains about 75 km east of Tin Essako (1826N/0229E) during the last half of April.

• FORECAST

Isolated adults may be present in a few places in the Adrar des Iforas. A few adults could eventually appear from the Algerian Sahara at the end of the forecast period.

Niger

• SITUATION

No surveys were carried out and no locusts were reported up to 20 April.

• FORECAST

Isolated adults may be present in a few places in the Air Mountains. A few adults could eventually

appear from the Algerian Sahara at the end of the forecast period.

Chad

- **SITUATION**

No locusts were reported during April.

- **FORECAST**

No significant developments are likely.

Senegal

- **SITUATION**

No locusts were reported up to 28 April.

- **FORECAST**

No significant developments are likely.

Benin, Burkina Faso, Cameroon, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea Bissau, Guinea, Liberia, Nigeria, Sierra Leone and Togo

- **FORECAST**

No significant developments are likely.

Algeria

- **SITUATION**

During April, local breeding occurred at one place in the eastern Sahara where solitary and transiens second and third instar hoppers were present at densities up to 80 hoppers/bush on the 24th near Illizi (2630N/0825E). Ground control operations treated 20 ha. Elsewhere, no locusts were seen during surveys carried out in the central Sahara north of Adrar (2753N/0017W), in the south near the Malian border and in the east along the Libyan border between In Amenas (2803N/0933E) and Djanet (2434N/0930E).

- **FORECAST**

Small-scale breeding will continue near Illizi where new adults could start to appear by the end of May. Low numbers of adults may be present in a few other places in the central and eastern Sahara and limited breeding could occur in those areas that received recent rainfall. These adults may gradually move south towards the summer breeding areas in the northern Sahel.

Morocco

- **SITUATION**

During the first decade of April, scattered mature solitary adults, at densities up to 200 adults/ha, were seen laying eggs in the spring breeding areas south of Erfoud (3128N/0410W) and near the Algerian border in Wadi Ziz and in the Dayt Maader Basin (3045N/0446W).

- **FORECAST**

Small-scale hatching is likely to occur early in the forecast period south of Erfoud, giving rise to low numbers of hoppers that should fledge by the end of the forecast period. Scattered adults are likely to be

present in parts of the Western Sahara where small-scale breeding could occur in favourable areas.

Libyan Arab Jamahiriya

- **SITUATION**

No locusts were reported during April.

- **FORECAST**

Low numbers of hoppers and adults may be present in areas of previous breeding near Ghat.

Tunisia

- **SITUATION**

No reports were received during April.

- **FORECAST**

No significant developments are likely.

CENTRAL REGION

Sudan

- **SITUATION**

No locusts were seen during surveys carried out on the Red Sea coast in the Tokar Delta in April.

- **FORECAST**

Isolated adults may start to appear in a few places in the summer breeding areas at the end of the forecast period.

Eritrea

- **SITUATION**

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

- **FORECAST**

Isolated locusts may be present and breeding in a few places on the central coast near Massawa where rain fell in April.

Ethiopia

- **SITUATION**

No reports were received during April.

- **FORECAST**

No significant developments are likely.

Djibouti

- **SITUATION**

No locusts were reported during April.

- **FORECAST**

No significant developments are likely.



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Somalia

- **SITUATION**

No reports were received during April.

- **FORECAST**

Isolated adults may be present in a few places on the northwest coast between Djibouti and Berbera.

Egypt

- **SITUATION**

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

- **FORECAST**

No significant developments are likely.

Saudi Arabia

- **SITUATION**

No locusts were reported during April

- **FORECAST**

Isolated adults may be present on the Red Sea coast near Jizan and could breed on a limited scale in areas of recent rainfall.

Yemen

- **SITUATION**

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

- **FORECAST**

Isolated adults may be present and could persist in any areas that remain green on the coastal plains of the Red Sea and Gulf of Aden. Small-scale breeding could occur in areas of recent rainfall.

Oman

- **SITUATION**

No locusts were seen during surveys carried out in April along the Batinah coastal plains of the north and on the Musandam Peninsula.

- **FORECAST**

No significant developments are likely.

Bahrain, Iraq, Israel, Jordan, Kenya, Kuwait, Lebanon, Palestine, Qatar, Syria, Tanzania, Turkey, UAE and Uganda

- **FORECAST**

No significant developments are likely.

EASTERN REGION

Iran

- **SITUATION**

No locusts were seen during surveys carried out on the southern coastal plains near Chabahar (2517N/6036E) and in the interior near Iranshahr (2715N/6141E) on 13-14 March.

- **FORECAST**

No significant developments are likely.

Pakistan

- **SITUATION**

No locusts were seen during surveys carried out in the spring breeding areas in Baluchistan in March and the first half of April.

- **FORECAST**

Isolated adults may start to appear in a few places in the summer breeding areas at the end of the forecast period.

India

- **SITUATION**

No locusts were seen during surveys carried out in Rajasthan up to 27 April.

- **FORECAST**

Isolated adults may start to appear in a few places in the summer breeding areas at the end of the forecast period.

Afghanistan

- **SITUATION**

No reports received.

- **FORECAST**

No significant developments are likely.



Announcements

Locust reporting. During locust outbreaks, upsurges and plagues, RAMSES output files with a brief interpretation should be sent twice/week and affected countries are encouraged to prepare decadal bulletins summarizing the situation. During recession periods, countries should report at least once/month and send RAMSES data with a brief interpretation. All information should be sent by e-mail to the FAO/ ECLD Desert Locust Information Service (eclod@fao.org). Information received by the end of the month will be included in the FAO Desert Locust 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.

Desert Locust Mapper. The Locust Group has launched an updated version of the Desert Locust Mapper that allows users to access locust data, both historical and current, and display swarm, band, hopper and adult infestations on maps at different scales. See: www.fao.org/ag/locusts (Mapper)

eLocust2. FAO has developed a new version of eLocust in collaboration with affected countries and the French Space Agency (CNES/Novacom) that allows field officers to enter survey and control data directly in the field and transmit it in real time via satellite to their national locust centre. Data can also be downloaded to a PC and visualized on GoogleEarth. The software is in both English and French. FAO DLIS is currently distributing units to affected countries with the goal of becoming fully operational by this summer. Photos and more information are available at: www.fao.org/ag/locusts/en/activ/DLIS/index.html

Desert Locust warning levels. DLIS has initiated an experimental colour-coded scheme on the Locust Watch web page to indicate the seriousness of the current Desert Locust situation: green for *calm*, yellow for *caution* and red for *danger*. The levels indicate the perceived risk or threat of current Desert Locust infestations to crops and appropriate actions are suggested for each level. Your feedback on the usefulness of this scheme and any suggested improvements is welcome.

New information on Locust Watch. New material is available on the Locust Group's web page, Locust Watch (www.fao.org/ag/locusts):

- Report of the 13th EMPRES/CR Liaison Officers meeting (English) – Publications section
- EMPRES/CRC regional workshop on RAMSES, eLocust2 and remote sensing – Activities section
- Report of the 4th EMPRES/WR Liaison Officers meeting (French) – Publications section
- Report of the 1st EMPRES/WR Steering Committee (French) – Publications section

2006 events. The following meetings are tentatively scheduled:

- **FAO/World Bank.** Pesticide management workshop, Bamako (Mali), 15-18 May
- **CRC.** 25th Session, Doha (Qatar), 28 May – 1 June (tentative)
- **SWAC.** Advanced training for National Locust Information Officers (RAMSES/eLocust2), Jodhpur (India), 12-16 June (tentative)
- **EMPRES/WR.** Advanced training for National Locust Information Officers (RAMSES/eLocust2), Agadir (Morocco), 3-7 July

- **DLCC.** 38th Session, Rome, 11-15 September
- **EMPRES/CR.** 14th Liaison Officer Meeting, Muscat (Oman), 11-15 November
- **SWAC.** 25th Session, Tehran (Iran), 20-23 November
- **EMPRES/WR and CLCPRO.** 5th EMPRES Liaison Officer Meeting and 2nd Session CLCPRO, Nouakchott (Mauritania), 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 km² • band: 1 - 25 m²

SMALL

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

MEDIUM

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

LARGE

- 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.

HEAVY

- more than 50 mm of rainfall.



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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, Niger, Senegal, Tunisia; during plagues only: Burkino Faso, Cape Verde, Gambia, Guinea and Guinea-Bissau.

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:	15.6.06	LIKELY PROBABLE	POSSIBLE POSSIBLE
favourable breeding conditions conditions favorables à la reproduction			
major swarm(s) essaim(s) important(s)			
minor swarm(s) essaim(s) limité(s)			
non swarming adults adultes non essaimant			

SITUATION: Apr 2006 avr 2006	swarms or hopper bands	adults / hoppers adultes / larves	
	essaims ou bandes larvaires	in groups en groupes	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)			