

DESERT LOCUST BULLETIN

FAO Emergency Centre for Locust Operations



No. 305



General Situation during February 2004
Forecast until mid-April 2004

(3 March 2004)

There are signs that the situation may be moving towards the early stages of an upsurge as Desert Locust moved into the spring breeding areas in Northwest Africa and Saudi Arabia during February. Numerous swarms invaded the Draa Valley in Morocco and some adults crossed the Atlas Mountains while others may have reached the Canary and Madeira Islands. Despite intensive control efforts, another generation of breeding is in progress and swarms are forming in northern Mauritania, in Western Sahara and on the Red Sea coast in Saudi Arabia. More swarms are expected to move to the spring breeding areas in Morocco and Algeria and lay eggs, while those on the Red Sea coast will move into the interior of Saudi Arabia. Hatching and band formation will occur during the forecast period in these places.

Western Region. Widespread hatching occurred during February in northern Mauritania where control operations were hampered by a severe shortage of pesticides. New swarms formed in western Mauritania, in adjacent areas of Western Sahara and in Niger. Many of these swarms were seen moving northwards. After mid-month, swarms reached the southern side of the Atlas Mountains in Morocco and adult groups appeared in western Algeria carried on unusually strong winds. Egg laying started during the last week of February in Morocco. As temperatures warm up, hatching and band formation is likely to commence by late March. In Mali, small residual populations may be

present in the north. Although control operations are in progress, more adult groups and swarms will almost certainly move northwards in the coming weeks and lay eggs over a large area south of the Atlas Mountains in Morocco and Algeria if rainfall occurs. Initially, the scale of this movement may be limited but could increase dramatically in April if more swarms form in Mauritania and Western Sahara.

Central Region. A second generation of breeding occurred on the northern Red Sea coastal plains in Saudi Arabia where hatchlings were forming hopper bands, and adults from earlier breeding continued to form groups and swarms. Some of the groups moved into the spring breeding areas in the interior and laid eggs. In the coming weeks, new swarms will form on the coast and could move inland where hatching and band formation should start shortly. Groups of hoppers were present on the northern coast in Sudan and hopper bands were reported in adjacent areas on the southeastern coast in Egypt. Hopper bands were also present on the coast of Eritrea near the Sudan border. There were a few unconfirmed swarms in northern Sudan that may have come from southern Egypt. Control operations were carried out in the four countries. Elsewhere, scattered adults were present on the Red Sea coast in Yemen and on the northwestern coast in northern Somalia.

Eastern Region. No locusts were reported and very little rain fell in the Region during February. Nevertheless, scattered adults are likely to be present and laying eggs in the spring breeding areas in western Pakistan where good rains fell in January. There is a low risk that a few swarms may appear in western Iran from Saudi Arabia during periods of southwesterly winds.

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 2004

Although little rain fell during February, breeding conditions remained favourable in northern Mauritania and Western Sahara. Conditions were also favourable in Saudi Arabia on the northern coastal plains of the Red Sea and in the central interior.

In the **Western Region**, light to moderate showers fell during the third week of February along the southern side of the Atlas Mountains in Morocco (Tata 30 mm) and parts of Algeria (Bechar 2 mm), extending from Dakhla (7 mm), Laayoune (18 mm) and Tantan (20 mm) on the Atlantic coast to Bir Moghreïn (3 mm) in northern Mauritania, and Tindouf (6 mm) in western Algeria. These were associated with a low-pressure system over the Canary Islands that moved over the western Mediterranean and caused exceptionally strong southerly and southwesterly winds on the 17-20th. During the month, daytime temperatures increased throughout the region but temperatures at night remained low. Prevailing winds were mainly from the north, northwest and northeast except during atmospheric disturbances over the Mediterranean when they were from the south for brief periods. Vegetation remained green and conditions were favourable for breeding over large portions of northwestern and northern Mauritania, and in adjacent areas in Western Sahara and western Algeria. Vegetation dried out during the month in central and southwestern Mauritania (Brakna and Trarza). Green vegetation was present in the Algerian Sahara northwest of Tamanrasset (Adrar n Ahnet) and in Niger where favourable breeding conditions prevailed in the wadis in the eastern Air Mountains. Breeding conditions improved and became favourable during the month in the Draa Valley in Morocco. Vegetation continued to dry out in northern Mali due to hot easterly winds.

In the **Central Region**, breeding conditions remained favourable on the northern coastal plains of the Red Sea in Saudi Arabia during February. By the end of the month, vegetation was starting to dry out in a few places near Jeddah. As a result of good rains during January, breeding conditions improved within

a large part of the central interior between the Hejaz Mountains and Riyadh and temperatures were starting to increase. Conditions were much less favourable on the western side of the Red Sea where vegetation was drying out in most areas from Massawa, Eritrea to Shalaty, Egypt. Isolated showers were reported on the coast north of Port Sudan on the 8th and in the Tokar Delta on the 21st. Moderate to heavy rain fell early in February on the southern coastal plains of the Red Sea in Yemen. Light showers were reported during the same period along the Gulf of Aden coast in Yemen and in northwestern Somalia where vegetation was green.

In the **Eastern Region**, light to moderate rain fell in the northwestern part of the spring breeding area in Baluchistan, western Pakistan in early February (Nushki 4 mm, Quetta 16 mm). Nevertheless, breeding conditions improved throughout Baluchistan as a result of the good rains during the second half of January. Conditions may also be improving in adjacent areas of southeastern Iran.



Area Treated

Since October, 590,000 ha have been treated. Of this, control teams treated 164,000 ha in February as follows:

Algeria	1,908 ha	(1-24 February)
Egypt	895 ha	(2-27 February)
Eritrea	1,920 ha	(28-30 January)
Mauritania *	81,459 ha	(1-20 February)
Morocco	80,098 ha	(1-27 February)
Niger	758 ha	(5-11 February)
Saudi Arabia	8,940 ha	(29-31 January)
	24,287 ha	(5-24 February)
Sudan	308 ha	(6-23 February)

* includes barrier treatments protecting 27,222 ha



Desert Locust Situation and Forecast

(see also the summary on page 1)

WESTERN REGION

Mauritania

• SITUATION

During February, the situation remained extremely serious as locust infestations persisted in the northwest and north. Large infestations of late instar

hoppers, groups and several bands mixed with groups of fledglings and immature adults were present west of Bennichab (1932N/1512W), between Akjoujt (1945N/1421W) and Atar (2032N/1308W), and to the north, east and south of Atar. Adults continued to mature during the month, forming groups and swarms in some of these areas. Another generation of hatching was in progress in southwestern Adrar by mid-month. There were several reports of dense, medium to large sized maturing swarms moving northwards from Inchiri and southwestern Adrar. Late instar hopper bands, immature adult groups and mature swarms were seen in the Dakhlet Nouadhibou region. At the end of the month, adults were seen copulating in some places in Inchiri.

Further north in Tiris-Zemmour, widespread hatching occurred near Zouerate (2244N/1221W), Ghalamane (2456N/1124W) and M'haoudatt (2255N/1200W) where new early instar hopper bands were forming in addition to late instar bands, fledglings and adults that were already present. Adults were maturing and forming groups and several swarms, some of which were laying eggs, while others were seen flying northwards. Adult groups were also reported copulating southeast of Bir Moghreïn in Oued El Ma area (2431N/0828W) in early February. Ground and aerial control operations treated 54,237 ha (full cover) and 27,222 ha (barrier) during February.

Elsewhere, isolated populations of solitarious immature adults were present northwest of Moudjeria (1751N/1228W) in northern Brakna. No locusts were seen in Trarza where vegetation is dry.

• **FORECAST**

During March, more adult groups and swarms will form in the north (Adrar, Tiris Zemmour) and northwest (Inchiri, Dakhlet Nouadhibou) as older hopper bands fledge. Some of these swarms will stay, mature and lay eggs if conditions remain favourable while others will move north towards the spring breeding areas on the southern side of the Atlas Mountains. New hopper bands will also form in the north and northwest early in the forecast period from recent hatching. By April, many of these are expected to have fledged and start forming swarms.

Mali

• **SITUATION**

No surveys were carried out during February. Nevertheless, small residual populations of adults and groups are likely to be present in parts of the Tamesna and eastern Adrar des Iforas.

• **FORECAST**

Small groups of adults are likely to persist in those areas that remain green in the Adrar des Iforas and Tamesna. As vegetation continues to dry out, further concentration is expected and a few small swarms

could form. These swarms are likely to move towards northern Mauritania and to the spring breeding areas on the southern side of the Atlas Mountains in Morocco and Algeria.

Niger

• **SITUATION**

During the last days of January, there were reports of a few swarms moving from the Tafidet area (1817N/0923E) in the southeastern Air Mountains northwards to Arakaou (1858N/0940E) and Issaouane (1901N/0924E) where many high-density adult groups were seen.

During February, groups of hoppers (at densities up to 20 hoppers/m²) and adults (up to 30,000 adults/ha) persisted in several wadis in the Tafidet area where they were maturing. Most of the hoppers had reached the fifth instar and many of the adult groups were seen laying eggs. On the 10th, a small low-density mature swarm was seen at 1814N/0940E. Ground control operations treated 758 ha during the month.

Although vegetation was still green in the Tezerzait area (ca. 1825N/0500E) in northwestern Tamesna, the locust situation was reported to be calm.

• **FORECAST**

New hatching and band formation are likely to commence early in the forecast period. As temperatures warm up, hoppers will mature and fledge and, by mid-April, a few new swarms could start to form. Some of these may remain in place while others could move to the spring breeding areas in Algeria and Morocco.

Chad

• **SITUATION**

No reports received.

• **FORECAST**

No significant developments are likely.

Senegal

• **SITUATION**

No locusts were reported during February.

• **FORECAST**

No significant developments are likely.

Algeria

• **SITUATION**

During the first half of February, immature adults were forming groups in the west near Tindouf (2742N/



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0810W) at densities up to 3,000 adults/ha. Isolated mature adults were seen at two places in the central Sahara between Tamanrasset (2250N/0528E) and In Salah (2712N/0229E). On the 19-20th, there was an influx of gregarious immature and mature adults near Tindouf from neighbouring areas in Western Sahara and Mauritania on strong southwesterly and southerly winds. Some adults reached as far north as 30N. Subsequently, groups of fledglings, at densities up to 6/m², and maturing adults, at densities up to 60,000/ha, were reported at several places between Tindouf and Beni Abbes (3011N/0214W). Control operations treated 1,908 ha during the month.

• FORECAST

As temperatures warm up, hatching from earlier laying during the winter is expected to occur near Tindouf. Local populations are likely to be supplemented in the west by adult groups and swarms coming from neighbouring areas of northern Mauritania, Western Sahara and, to a lesser extent, Mali during periods of southwesterly and southerly winds. Initially, the scale of this movement may be limited but is likely to increase significantly during April when there is a risk that adult groups and swarms could spread over a large area south of the Atlas Mountains between Tindouf and Ghardaia and lay eggs, depending on rainfall. Groups of adults may already be present in some of these places west of Bechar and laying eggs in areas of recent rainfall. If so, spring hatching should start by the end of the forecast period.

Morocco

• SITUATION

Swarms started to form during the first week of February in Western Sahara, and hopper and adult groups continued to mature between the Mauritanian border and Laayoune (2708N/1313W) throughout the month. Copulating adult groups and first instar hoppers were also seen near Tichla (2135N/1458W). From mid-month onwards, numerous immature swarms moved northwards to the spring breeding areas south of the Atlas Mountains where they dispersed along a 600 km stretch of the Draa Valley from Tan-tan (2827N/1109W) to Zagora (3019N/0550W). Infested areas ranged from 5-3,700 ha in size and swarm densities were up to 80 adults/m². Most of these movements were associated with the

strong southerly winds on 18-19 February. Some of these winds carried adults over the Atlas Mountains to the northwestern coastal plains where small groups were scattered between Essaouira (3126N/0958W) and El Jadida (3308N/0835W) as well as in the Middle Atlas near El Brouj (3243N/0405W). During the last week of the month, many of the adults in the Draa Valley were seen copulating.

• FORECAST

Hatching is expected to occur in the Western Sahara as temperatures warm up, causing locust numbers to increase further. Current hopper and adult populations will continue to form bands and swarms. These are likely to be supplemented by additional adult groups and swarms from adjacent areas in Mauritania. In the Draa Valley, hatching is expected to commence during the second half of March and hopper bands may form. There is a high risk of additional adult groups and swarms moving into the Draa Valley and laying throughout the entire forecast period.

Libyan Arab Jamahiriya

• SITUATION

No reports received.

• FORECAST

Low numbers of locusts may be present near Ghat and in the Al Hamada Al Hamra. There is a low risk of a few adult groups and swarms appearing from the west.

Tunisia

• SITUATION

No reports received.

• FORECAST

There is a low risk that a few adult groups and swarms could appear in the south during periods of warm southerly and southwesterly winds and breed in areas of recent rainfall.

Burkina Faso, Cape Verde, Gambia, Guinea Bissau and Guinea Conakry

• FORECAST

No significant developments are likely.

ATLANTIC OCEAN

Madeira Islands

• SITUATION

There was an unconfirmed report of locusts arriving from the northeast during the third week of February. It is possible that some adults may have been blown from Mauritania and Western Sahara out to sea towards the islands on strong winds associated with a depression over the Atlantic coast of Northwest Africa on 17-20 February.

• **FORECAST**

No significant developments are likely.

Canary Islands

• **SITUATION**

There was an unconfirmed report of individual locusts on Fuerteventura on 28 February. These may have arrived from the Northwest African mainland on strong winds associated with a depression on 17-20 February.

• **FORECAST**

No significant developments are likely.

CENTRAL REGION

Sudan

• **SITUATION**

During February, ground control operations continued on the Red Sea coast in the Tokar Delta and treated 210 ha of groups of late instar hoppers, fledglings and maturing adults. Densities were as high as 2,700 adults/ha but had declined to 325 adults/ha by the last week of the month. On the northern coast, groups of gregarious late instar hoppers and immature adults were present at several places north of Port Sudan near Mageit (2016N/3705). Further north, similar populations were seen on the coast about 10 km south of the Egyptian border on the 21st. Control operations treated 98 ha in the two areas on the northern coast.

There was an unconfirmed report of three dense mature swarms in the northern interior near Dongola (1910N/3027E). They were seen flying from the north on 1 March, suggesting that they may have come from adjacent areas in southern Egypt.

• **FORECAST**

Additional breeding on the Red Sea coast is unlikely unless further rainfall occurs. Consequently, locust numbers will decline as vegetation dries out. Those locusts that remain are expected to concentrate and continue to form small groups of adults.

Eritrea

• **SITUATION**

On 28-30 January, aerial control operations treated 1,920 ha of hopper bands mixed with adults in millet crops near the Sudanese border at Meleet (1730N/3846E). Low densities of scattered adults and gregarizing solitary hoppers were seen in these same areas during follow-up surveys on 6 February. No locusts were seen elsewhere on the coast between the Sudanese border and Shieb (1551N/3903E), west of Massawa, during the first week of the month.

• **FORECAST**

Locust numbers will decline on the Red Sea coastal plains between Massawa and the Sudanese border as vegetation dries out.

Somalia

• **SITUATION**

Isolated immature and mature adults were seen on the northwestern coast between Berbera (1028N/4502E) and the Djibouti border during a joint survey carried out on 14-18 February and again later in the month.

• **FORECAST**

Limited breeding may occur along the northwestern coastal plains, especially if additional rains fall.

Ethiopia

• **SITUATION**

No locusts were seen during surveys carried out in the southeast near Harar (0919N/4206E) and Dire Dawa (0935N/4150E) during February.

• **FORECAST**

No significant developments are likely.

Djibouti

• **SITUATION**

No locusts were seen on the coastal plains between Djibouti city and the Somali border during a joint survey carried out on 14-18 February.

• **FORECAST**

No significant developments are likely.

Egypt

• **SITUATION**

During February, hopper bands of all instars and fledglings (at densities up to 30 locusts/m²), and immature and mature transiens adults (at densities up to 300 adults/tree), were present at several places on the Red Sea coastal plains west of Halaib (2212N/3635E) and near the Sudanese border. Control operations treated 895 ha during the month.

• **FORECAST**

Small groups of adults will continue to form on the southeastern coastal plains of the Red Sea near Halaib and the Sudanese border. There is a moderate risk that some of these may form small swarms and perhaps move across the Red Sea.

Saudi Arabia

• **SITUATION**

During February, dense late instar hopper bands were present on the northern Red Sea coastal plains between Jeddah and Yenbo (2405N/3802E) where



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fledging was in progress and many groups of adults were forming and maturing. Most of the adult groups and a few swarms were seen laying eggs in these areas. At mid-month, some mature adults and groups, at densities up to 70,000 adults/ha, moved into the spring breeding areas in the interior where they laid eggs in areas west of Buraydah (2620N/4359E) that had received good rains during January. Second generation hatching started on the Red Sea coast near Jeddah early in the month and small dense bands were forming in some places by mid-month.

• **FORECAST**

A few more adult groups and small swarms will form on the northern Red Sea coastal plains in early March as the last of the remaining late instar hopper bands fledge. Second generation hatching and band formation will continue and new swarms could start forming from the second half of March onwards. In the spring breeding areas, hatching is expected to start about mid-March and hoppers will form groups and bands. As vegetation dries out on the coast, any swarms that form are expected to move into the interior and start to lay eggs by the end of the forecast period.

Yemen

• **SITUATION**

During February, isolated maturing adults were present on the central Red Sea coastal plains near Hodeidah (1450N/4258E). There was an unconfirmed report of locusts on Socotra Island although this is unlikely to be Desert Locust.

• **FORECAST**

Small-scale breeding is expected to occur on the Red Sea coastal plains near Hodeidah. A few adults may appear further north in the border area as vegetation becomes green. No significant developments are likely.

Oman

• **SITUATION**

No locusts were seen during surveys carried out in February.

• **FORECAST**

A few isolated adults may appear on the Batinah coast and breed on a small scale if conditions are favourable.

Jordan

• **SITUATION**

No reports received.

• **FORECAST**

There is a low risk that a few swarms could appear in the south from the Red Sea coast and interior of northern Saudi Arabia. This will most likely occur during periods of warm southerly winds associated with depressions over northern Arabia.

Iraq

• **SITUATION**

No reports received.

• **FORECAST**

There is a low risk that a few swarms could appear in the south from the Red Sea coast and interior of northern Saudi Arabia. This will most likely occur during periods of warm southwesterly and westerly winds associated with depressions over northern Arabia.

Kuwait

• **SITUATION**

No reports received.

• **FORECAST**

There is a low risk that a few swarms could appear from the Red Sea coast and interior of northern Saudi Arabia. This will most likely occur during periods of warm southwesterly and westerly winds associated with depressions over northern Arabia.

Bahrain, Israel, Kenya, 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 the southeast on the coast near Jask and in the interior of Sistan-Baluchistan near during February.

• **FORECAST**

There is a low risk that a few swarms could appear in coastal areas of Bushehr Province from the Red Sea coast and interior of northern Saudi Arabia. This will most likely occur during periods of warm southwesterly and westerly winds associated with depressions over northern Arabia.

Pakistan

• **SITUATION**

No locusts were reported during the first half of February.

• **FORECAST**

Scattered adults are likely to be present and

breeding in areas of recent rainfall on the coast and in the interior of Baluchistan. Small-scale breeding will continue during the forecast period.

India

• **SITUATION**

No locusts were reported during the first half of 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.

eLocust. Updated details of a new system for recording and transmitting locust survey and control data collected in the field as well as country maps can be found on the Internet at: www.fao.org/news/global/locusts/elocust.htm

Outbreak photos. Pictures of the recent outbreaks in the Western and Central Regions are available on the Internet at: www.fao.org/news/global/locusts/outbreakpix04.htm

Publications on the Internet. New FAO publications and meeting reports are available for downloading at www.fao.org/news/global/locusts/pubslst.htm:

- *EMPRES/CR Workshop on the Use of Green Muscle and PAN to control Desert Locust hopper bands* (English)
- *2nd EMPRES/WR Liaison Officer Meeting report* (French)

Desert Locust Guidelines. The French and Arabic versions of the *Desert Locust Guidelines* are now available as well as the English version of *Volume VI. Safety and Environmental Precautions* and an updated index. These can be downloaded from the Internet at: www.fao.org/news/global/locusts/pubs1.htm. Please contact the Locust Group if you would like to receive hard copies.

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 (crc-locust@fao.org).

2004 events. The following meetings are scheduled:

- **CRC.** 24th session of the Commission and 26th session of the Executive Committee, Jeddah (Saudi Arabia), 17-22 April
- **Desert Locust Technical Group Workshop.** 8th meeting, Nouakchott (Mauritania), 2-6 May
- **CLCPRO.** 1st Executive Committee, Niamey (Niger), 14-18 June
- **SW Asia Commission.** 24th session, Kabul (Afghanistan), October
- **Pesticide Referee Group.** 8th meeting, Rome, postponed to later in 2004

Urgent donor appeal. FAO launched an appeal to donors on 23 February for \$6 million, which is urgently needed to support Desert Locust control operations in Mauritania, and another \$3 million for Mali, Niger and Chad, in order to prevent the early stages of the current upsurge from developing into a plague. More details are available at: www.fao.org/news/global/locusts/040223AppealE.htm.



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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.

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

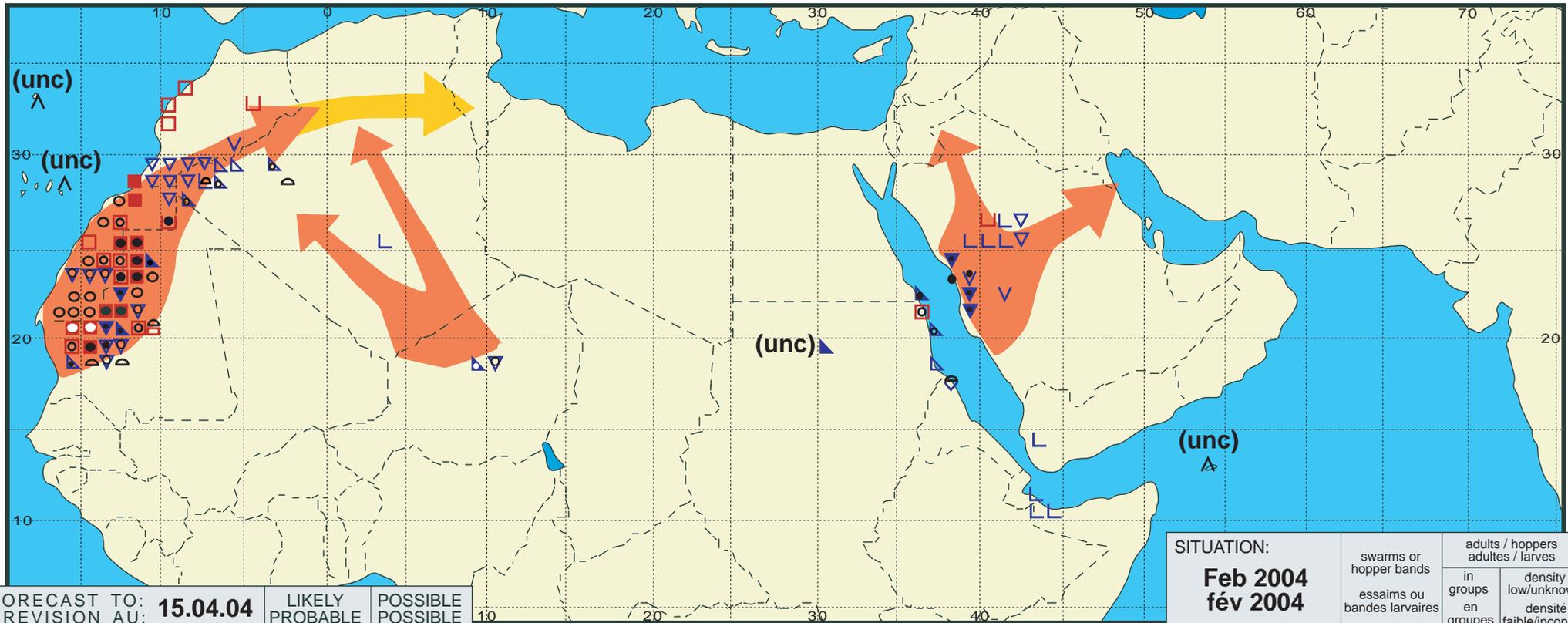
- locust-affected countries in South-West Asia: Afghanistan, India, Iran and Pakistan.



Desert Locust Summary

Criquet pèlerin - Situation résumée

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FORECAST TO: PREVISION AU: 15.04.04	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: Feb 2004 fév 2004	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)			