

warning level: **CAUTION (Central Region)**

DESERT LOCUST BULLETIN

FAO Emergency Centre for Locust Operations



No. 343

(3 May 2007)



General Situation during April 2007 Forecast until mid-June 2007

The Desert Locust situation remains serious in the Central Region even though aerial and ground control operations treated some 46,000 ha during April. As vegetation dried out, swarms moved from the coastal plains of the Red Sea and Gulf of Aden into spring breeding areas in the interior of Saudi Arabia, Yemen, northern Somalia and eastern Ethiopia and laid eggs. If the subsequent hopper bands are not controlled, new swarms could form in mid-June. In this case, swarms in Saudi Arabia are likely to move west to Sudan and perhaps south to Yemen while those in the Horn of Africa could remain and breed or perhaps migrate to the Indo-Pakistan border. All efforts should be made to monitor the developing and potentially dangerous situation closely and carefully.

Western Region. The situation remained calm in the region during April. Limited breeding continued in one area of northwest Mauritania and in southwest Algeria. Scattered adults were present in parts of central Algeria and western Libya. There is a slight risk that a few small swarms could move from the Central Region across the Sahel towards Niger, Mali and Mauritania. Consequently, Sahelian countries should be on alert.

Central Region. Aerial and ground control operations continued against hopper bands and swarms on the Red Sea coast in Eritrea, Saudi Arabia and Sudan where infestations declined in mid-April. In Sudan, a third generation of hatching

and band formation occurred on the coast in Tokar Delta, and adults and a few groups moved west to cropping areas along the Nile. Most of the remaining swarms on the Saudi Arabian coast migrated east to the spring breeding areas in the interior where they laid eggs that should hatch in early May. If the resulting hopper bands are not controlled, swarms could form and move across the Red Sea to the interior of Sudan in about mid-June and breed with the onset of the summer rains. Some swarms could also move south into Yemen. Several swarms moved up the escarpment in northwest Somalia and crossed into Djibouti and eastern Ethiopia in April, and a few adults were seen in the northern highlands. At least one swarm reached the interior of Yemen. As a result of good rains in April, most of the swarms laid eggs that will hatch in early May, and new swarms could form by mid-June along the northern Somalia / Ethiopian border and, to a lesser extent, in the Yemeni interior. If conditions remain favourable in these places, the swarms will remain and eventually lay eggs. Elsewhere, small-scale breeding continued on the Red Sea coast in southeast Egypt, and was reported on the southern coast in Yemen.

Eastern Region. Small-scale breeding occurred in the spring breeding areas in western Pakistan and southeastern Iran in April, and a swarm was treated on the coast of Pakistan. Control operations were also undertaken near the Pakistani border in Rajasthan, India where local breeding was in progress because of pre-monsoon rainfall. Breeding will decline in the spring areas but will continue along the Indo-Pakistan border where higher than normal populations are expected to be present at the beginning of the summer.

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, 00153 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

Internet: www.fao.org

DLIS: www.fao.org/ag/locusts



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Weather & Ecological Conditions in April 2007

Good rains fell in the spring breeding areas in the interior of Yemen and Saudi Arabia as well as in eastern Ethiopia and northwest Somalia. Rains also fell along the Indo-Pakistan border. Consequently, ecological conditions were favourable for breeding in all of these areas.

In the **Western Region**, mainly dry conditions prevailed during April. Light to moderate rain fell at times in a few places along the southern side of the Atlas Mountains in Morocco. Consequently, vegetation remained green in the Draa, Ziz and Ghris Valleys. No significant rain was reported in Western Sahara where vegetation was dry. During the third decade of April, good rains may have fallen along both sides of the Algerian/Libyan border as well as parts of central Libya.

In the **Central Region**, good rains fell during April on the coast in northwest Somalia as well as on the escarpment and plateau from Boroma to Erigavo, extending to Djibouti, eastern Ethiopia and the northern Ogaden. Good rains also fell in the Ethiopian Highlands, in the interior of Yemen and in the central and northern interior of Saudi Arabia. As most of these areas received rainfall in late March, ecological conditions were already becoming favourable for breeding. Showers may have also fallen in parts of eastern Sudan during the last decade of April. A deep low-pressure system persisted over northern Saudi Arabia during the second week of April, causing strong southwesterly and southerly winds over the Arabian Peninsula and the Horn of Africa, which probably allowed swarms to move into the interior of Saudi Arabia and Yemen. In the winter breeding areas along both sides of the Red Sea, very little rain fell except on the northern Red Sea coast in Yemen at mid-month. Consequently, vegetation was drying out and breeding conditions were becoming unfavourable. Vegetation was green in some of the wadis in the Red Sea Hills in southeastern Egypt and northeastern Sudan. In southern Oman, breeding conditions may be favourable in coastal and interior areas of Dhofar where good rains fell in late March.

In the **Eastern Region**, light to moderate rain fell during April in the Indus Valley in Pakistan. Some of these showers reached the summer breeding areas along both sides of the border, mainly in Cholistan Desert, Pakistan and Rajasthan, India. As heavier rain had fallen in these areas during March, ecological conditions became favourable for breeding in parts of Rajasthan in April. Showers also fell in the eastern portion of the spring breeding area in Pakistan between Lasbela and Quetta, and in the western portion between Jask and Kahnuj, Iran.



Area Treated

During April, more than 46,000 ha were treated, including aerial control operations in Eritrea, Ethiopia, Saudi Arabia and Sudan.

Eritrea	36,420 ha (March)
	3,300 ha (1-20 April)
Ethiopia	296 ha (April)
India	no details (April)
Pakistan	50 ha (April)
Saudi Arabia	34,980 ha (1-30 April)
Sudan	7,996 ha (1-30 April)



Desert Locust Situation and Forecast

(see also the summary on page 1)

WESTERN REGION

Mauritania

• SITUATION

During April, isolated solitary adults were maturing in a few places between Akjoujt (1945N/1421W) and Atar (2032N/1308W). Isolated third instar hoppers were seen at one place north of Atar at mid-month. No surveys were conducted during the third decade of the month.

• FORECAST

Isolated adults will persist in those areas that remain green in southwest Adrar and in parts of Tiris-Zemmour. No significant developments are likely.

Mali

• SITUATION

No locusts were reported in April.

• FORECAST

Isolated adults may be present and could persist in the few wadis in the Adrar des Iforas that may remain green.

Niger

• SITUATION

No reports were received in April.

• FORECAST

Isolated adults may be present and could persist in the few places on the western side of the Air Mountains and near Iférouane that remain green.

Chad

• SITUATION

No reports were received in April.

• FORECAST

No significant developments are likely.

Senegal

• SITUATION

No locusts were reported in 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, small-scale breeding occurred at one place between Beni Abbes (3011N/0214W) and the Moroccan border. Low numbers of solitary mature adults were present between Beni Abbes and Tindouf (2741N/0811W), and near Adrar (2753N/0017W) and Djanet (2434N/0930E). No locusts were seen in the south near Tamanrasset.

• FORECAST

Scattered adults will persist in parts of the central and eastern Sahara where they could breed on a small scale in areas of recent rainfall.

Morocco

• SITUATION

During April, two immature solitary adults were seen in the northeast near Bouarfa (3232N/0159W).

• FORECAST

No significant developments are likely.

Libyan Arab Jamahiriya

• SITUATION

During April, isolated solitary were present near Ghat (2459N/1011E) and at one place in the Al Hamada Al Hamra. No locusts were seen in the southeast near Kufra.

• FORECAST

Scattered adults are likely to persist between Ghat and Ghadames where they could breed on a small

scale in areas of recent rainfall.

Tunisia

• SITUATION

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

• FORECAST

No significant developments are likely.

CENTRAL REGION

Sudan

• SITUATION

In early April, a third generation of breeding commenced on the Red Sea coast where a swarm was seen laying eggs in the Tokar Delta on the 4th. Hatching started on the 11th and ground control operations treated small bands at densities of up to 200 hoppers/m². Further south, aerial and ground control operations continued against a few remaining hopper bands and small maturing swarms on the plains between Agetai (1802N/3823E) and the Eritrean border. During the second week, immature and mature adults and a few swarms moved north along the plains to Tokar.

During the second half of April, control operations declined near the Eritrean border but continued in the Tokar Delta against first instar hopper bands. A few solitary mature adults moved along the coast north of Port Sudan and reached the Arbaat (1958N/3710E) area by the 23rd. Similar populations were also seen near the Egyptian border west of Wadi Diib on the 27th, probably from local breeding near Halaib. In the Nile Valley, solitary and transiens immature and mature adults, including an immature group, were seen in crops between Berber (1801N/3400E) and Dongola (1910N/3027E) from the 21st onwards. Most of these locusts probably originated from infestations on the coast near the Eritrean border. Aerial and ground control operations treated 7,996 ha on the Red Sea coast in April.

• FORECAST

Locusts will decline on the Red Sea coast although small hopper bands will continue to form in the Tokar Delta. Fledging is expected to occur during the second half of May and a few small swarms could form and move to the summer breeding areas between Kassala and Darfur. Adults and small swarms may also arrive in the interior during June from breeding areas in



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southeast Egypt and in Saudi Arabia, and egg laying will commence with the onset of the summer rains. In the Nile Valley, small-scale breeding is likely to occur in crops north of Khartoum in May that could give rise to small hopper groups and bands.

Eritrea

• SITUATION

During the first half of April, ground and aerial control operations continued against fledglings and immature swarms on the northern Red Sea coast between Mehimet (1723N/3833E) and the Sudanese border. Further south, scattered gregarious immature adults were present in previously infested areas between Sheib (1551N/3903E) and Geleb Sagla (1707N/3853E). During the second half of April, locust infestations declined on the coast. A few small groups and swarmlets persisted close to the Sudanese border near Karora (1745N/3820E) and Mehimet. Scattered solitary and gregarious adults were seen elsewhere on the coastal plains north of Sheib. Control teams treated 3,300 ha, 1,250 ha by air, on 1-20 April.

• FORECAST

Locust infestations will continue to decline on the Red Sea coast as vegetation dries out and the remaining adult groups and swarms move north into adjacent coastal areas in Sudan or west into the Highlands towards the western lowlands. Consequently, a few small groups and swarms are likely to appear in the highlands where they could stay for several weeks or continue to the western lowlands, mainly to irrigated agriculture in the Gash Barka. These locusts may be supplemented by similar populations arriving from northern Ethiopia. All efforts should be made to monitor the situation carefully in the above-mentioned areas.

Ethiopia

• SITUATION

In early April, ground control operations treated a 10 ha immature swarm near the Somali border northeast of Dire Dawa at Biye Gurgur (1022N/4239E). This swarm had arrived in late March from adjacent areas in northwest Somalia. In the highlands of Tigray, there were unconfirmed reports of scattered locusts in Mekele (1330N/3929E) and Zalanbessa (1431N/3923E) areas at mid-month. During the last decade of April, several small mature swarms, of up to

3 km² in size with densities of 5-6 adults/m², dispersed and laid eggs in the Dire Dawa (0935N/4150E) area. Ground and aerial control operations treated 296 ha during the month.

• FORECAST

A few more small swarms could appear early in the forecast period from neighbouring areas in northern Somalia and lay eggs between Jijiga and Dire Dawa. Hatching and band formation will start in early May and continue throughout the month in the Dire Dawa area. If the bands are not controlled, new swarms could form by mid-June. These swarms may persist and eventually lay eggs if breeding conditions remain favourable.

Djibouti

• SITUATION

A late report indicated that a swarm from northwest Somalia appeared in the southeast interior near Ali Adde (1108N/4253E) on 22 March and was moving towards the southwest. On the 25th, a swarm was reported further west on the Gobaad Plains near Kouta Bouyya (1101N/4157E) and the Ethiopian border. Locust infestations were also seen near the Somali border between Ali Olou (1121N/4307E) and Holhol (1118N/4255E).

During the first decade of April, a few mature swarms crossed the border from northwest Somalia and moved rapidly into the southern interior near the Henle Plains between Yoboki (1130N/4206E) and the Ethiopian border. No locusts were reported during the remainder of the month.

• FORECAST

There is a slight risk that some of the swarms may have laid eggs on the Henle and Gobaad plains. If so, hatching and band formation will take place during May and, if uncontrolled, a few small swarms could form in June. All efforts should be made to monitor the situation closely.

Somalia

• SITUATION

During the first week of April, a low-density 2 km² mature swarm was reported on the coast east of Berbera (1028N/4502E), and scattered immature adults and groups of mature adults were seen nearby. During the second half of the month, there were increased reports of small mature swarms on the escarpment and plateau from Boroma (0956N/4313E) to east of Hargeisa (0931N/4402E). Some of these swarms were copulating, and crop damage was reported in a few areas.

• FORECAST

Hatching and band formation will start in early May and continue throughout the month on the plateau between Boroma and Burao. Breeding could also

occur in areas of recent rainfall on the coast, further east to Erigavo and south of Burao. If the resulting bands are not controlled, new swarms could form in mid-June and remain to breed or move towards the east.

Egypt

• SITUATION

During April, small-scale breeding continued on the Red Sea coast between Halaib (2213N/3638E) and the Sudanese border where scattered third and fourth instar solitary hoppers and mature adults were present. At mid-month, immature solitary adults were seen in the Red Sea Hills between the coast and Aswan. Solitary hoppers were also reported at one location. Elsewhere, no locusts were seen along the shore of Lake Nasser and on the northwest coast.

• FORECAST

Locust numbers will decline on the Red Sea coast as vegetation dries out and breeding ends. Adults and perhaps a few small swarms, from infestations in Sudan and Saudi Arabia, could appear in the Red Sea Hills east of Aswan, near Lake Nasser and in the southern part of the Western Desert. Surveys should be maintained in these areas to monitor the situation carefully.

Saudi Arabia

• SITUATION

During April, aerial and ground control operations continued on the Red Sea coast between Lith (2008N/4016E) and Qunfidah (1909N/4107E) against hopper bands of all instars, at densities up to 30 hoppers/m², and immature and mature swarms up to 10 km² in size. Some of the mature swarms laid eggs during the first week and by the end of the month, hatching and band formation had occurred. Immature swarms were also reported further north along the coast to Yenbo (2405N/3802E) up to mid-month. Small-scale breeding occurred on the southern coast near Jizan (1656N/4233E) where solitary hoppers and mature adults were present. During the second half of April, mature adults, groups and swarms moved into the spring breeding areas in the interior and laid eggs near Khaybar (2542N/3917E), Buraydah (2621N/4358E) and Wadi Dawasir (2028N/4447E) from 19 April onwards. No locusts were seen in the interior north of Hail. Aerial and ground control operations treated 34,980 ha on the coast and in the interior during April.

• FORECAST

A few more swarms could form in May from hatching that occurred during April between Lith and Qunfidah. Unless further rainfall occurs, breeding will end on the coast and the adults and small swarms will primarily move into the interior although some

could migrate west across the Red Sea. In the spring breeding areas in the interior, hatching will occur in early May and hoppers are expected to form small bands. Fledging should take place in early June and small swarms could form and move towards the west or further south in about mid-June.

Yemen

• SITUATION

In the spring breeding areas of the interior, a few solitary mature adults were copulating close to farms near Shabwah (1522N/4700E) in early April. On the 13th, locals reported a mature swarm northwest of Thamud (1717N/4955E) on the southern edge of the Empty Quarter. On the 16th, one swarm at a density of 30 adults/m² laid eggs within an area of 30 km² in Wadi Hazar (1744N/4901E). Mature adults at densities up to 5 adults/m² were seen nearby in Wadi Khoudra (1746N/4904E). Scattered solitary mature adults were present and laying eggs within a large area south of Al Aber (1551N/4829E) between Marib (1525N/4521E), Ataq (1435N/4649E) and Shabwah. These adults and swarms are likely to have originated from both sides of the Gulf of Aden where breeding occurred on the coast in February and March. On the southern coast, third to fifth instar *transiens* and gregarious hoppers at densities of 5-20 hoppers/m² mixed with scattered maturing adults were reported at the end of the month near Sayhut (1512N/5115E).

On the Red Sea coast, only isolated solitary immature adults were present at a few places on the central and northern Tihama at mid-month. On the coastal plains west of Aden, a few solitary immature adults were present near Am Rijja (1302N/4434E).

• FORECAST

Locust numbers will increase in the interior as hatching occurs early in the forecast period between Marib, Ataq and Shabwah. Hatching will also occur at about the same time near Thamud where small hopper bands could form. In both areas, fledging is expected to occur in early June. There is a risk that immature swarms could appear from the interior of Saudi Arabia after mid-June. Locust breeding is likely to end on the southern coast and adults will probably move into the summer breeding areas in the interior.



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Oman

• SITUATION

No locusts were seen during surveys carried out in coastal and interior areas of the north during April.

• FORECAST

Scattered adults might be present and breeding on a small scale in a few coastal and interior areas in the southern province of Dhofar where good rains fell in March.

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

During April, isolated immature adults were present along the southeastern coast between Chabahar (2517N/6036E) and the Pakistani border. Nearby, local breeding was in progress on the Vashnam Plains as well as west of Chabahar where solitary hoppers of all instars were seen. In the interior, small-scale breeding occurred near Iranshahr (2715N/6141E) where solitary third instar hoppers mixed with mature adults were present. Isolated mature adults were seen near Bampur (2711N/6028E) and west of Saravan (2721N/6220E).

• FORECAST

Locust numbers are expected to decline in Sistan-Baluchistan as vegetation dries out and breeding ends. Low numbers of adults will move east towards the summer breeding area along the Indo-Pakistan border.

Pakistan

• SITUATION

During the first half of April, scattered mature solitary adults were present at several places along the coast and, to a lesser extent, in the interior of Baluchistan. Small-scale breeding occurred in the Shooli area (2535N/6207E) and on the coast east of Pasni (2515N/6328E) where isolated solitary hoppers of all instars were present. Control teams treated a 50 ha swarm on the coast between Pasni and Ormara (2512N/6438E) on the 14th.

• FORECAST

Locust numbers are expected to decline in Baluchistan as vegetation starts to dry out and breeding ends. Low numbers of adults will move from Baluchistan to the summer breeding areas of Cholistan and Tharparkar where scattered adults may already be present and breeding in areas of recent rainfall. There is a slight risk that a few swarms from the Horn of Africa could also arrive in Tharparkar in late June. Summer surveys should commence earlier than normal this year (in May) as higher than normal populations are expected to be present.

India

• SITUATION

During April, local breeding occurred near the Pakistani border west of Sam (2649N/7030E) in Rajasthan. Ground control teams treated scattered solitary third to fifth instar hoppers and mature adults at three places. No locusts were seen elsewhere during surveys in Rajasthan.

• FORECAST

Small-scale breeding could occur in a few places of Rajasthan where good rains fell in April. Higher than normal populations are expected to be present at the beginning of summer. These populations will breed once the monsoon rains arrive. There is a slight risk that a few swarms from the Horn of Africa could arrive in Rajasthan in late June.

Afghanistan

• SITUATION

No reports received.

• FORECAST

No significant developments are likely.



Announcements

Locust reporting. During recession periods, countries should report at least once/month and send RAMSES data with a brief interpretation. During caution (yellow) periods, 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. 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.

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 has distributed units to nearly all of the frontline countries. Photos and more information are available at: www.fao.org/ag/locusts/en/activ/DLIS/index.html

Desert Locust warning levels. A colour-coded scheme indicates the seriousness of the current Desert Locust situation: green for *calm*, yellow for *caution* and red for *danger*. The scheme is applied to the Locust Watch web page and to the monthly bulletin's header. The levels indicate the perceived risk or threat of current Desert Locust infestations to crops and appropriate actions are suggested for each level.

EMPRES/CRC website. Detailed information on EMPRES/CR and the FAO Central Region Commission as well as member country profiles can be found on the new EMPRES/CRC website at: www.crc-empres.org.

MODIS imagery. Columbia University's International Research Institute for Climate and Society (IRI) has started to provide 16-day 250-metre resolution MODIS imagery for monitoring ecological conditions in the Desert Locust recession area, in addition to the daily rainfall estimates already available. These products can be downloaded in different formats suitable for GIS at: http://iridl.ldeo.columbia.edu/maproom/.Food_Security/Locusts/index.html. Comments and questions can be addressed to Pietro Ceccato (pceccato@iri.columbia.edu).

New information on Locust Watch. DLIS launched a new initiative in October called *Desert Locust e-info news* as a means of keeping everyone informed on a weekly basis of new information on the Locust Group's web page, Locust Watch (www.fao.org/ag/locusts). The latest additions are:

- **DLCC session reports.** Archived reports of the 10-30th sessions: 1966-1989
- **Locust situation.** Several updates during April
- **CLCPRO.** Report of the 3rd Executive Committee meeting (French)
- **EMPRES/WR.** Report of the 2nd Session of the Steering Committee (French)

Links to the above information can be found in the new *Latest Additions* section on Locust Watch.

2007 events. The following meetings are scheduled:

- **CRC.** 29th meeting of the Executive Committee, Sana'a (Yemen), 20-24 May
- **CLCPRO.** 4th sessions of the Executive Committee and CLCPRO, Bamako (Mali), 18-22 June
- **EMPRES/WR.** 6th Liaison Officers Meeting (26-30 November) and 3rd Steering Committee (3-4 December), Agadir (Morocco)



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.

WARNING LEVELS

GREEN

- Calm. No threat to crops. Maintain regular surveys and monitoring.

YELLOW

- Caution. Potential threat to crops. Increased vigilance is required; control operations may be needed.

RED

- Danger. Significant threat to crops. Intensive survey and control operations must be undertaken.

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

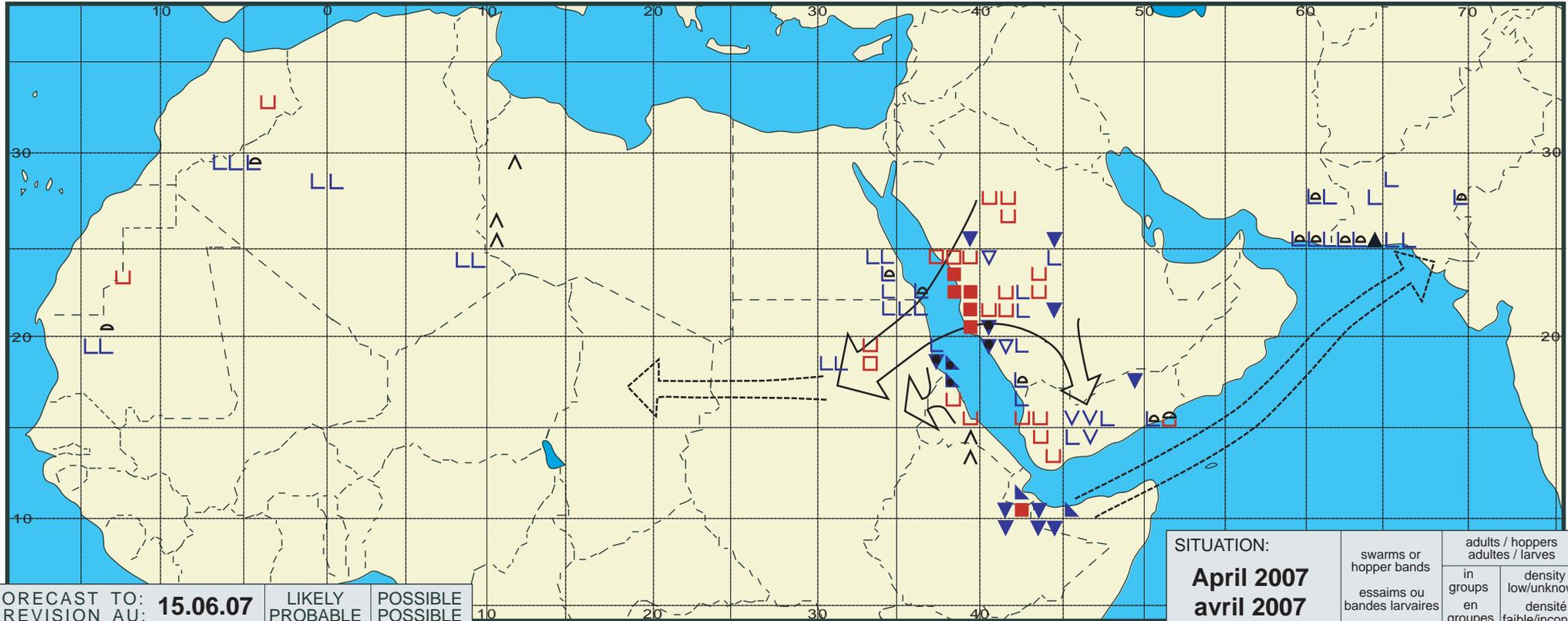
- locust-affected countries in South-West Asia: Afghanistan, India, Iran and Pakistan.



Desert Locust Summary

Criquet pèlerin - Situation résumée

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FORECAST TO:
PREVISION AU: **15.06.07**

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:

April 2007
avril 2007

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	▲	△	◀
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)	◼	◻	◻