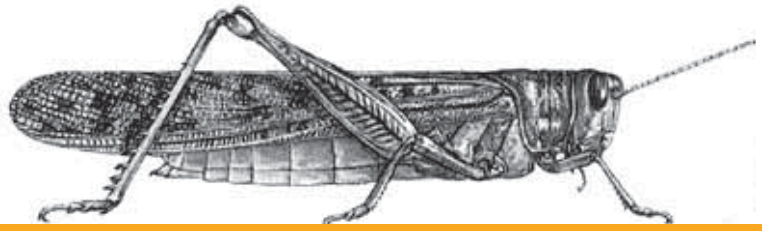

DESERT LOCUST BULLETIN

FAO Emergency Centre for Locust Operations **No. 348**

(2 October 2007)

General Situation during September 2007
Forecast until mid-November 2007

The Desert Locust outbreak continued in Yemen during September as more swarms formed in the interior and moved into the highlands and to the southern coast. Some swarms crossed the Gulf of Aden to Djibouti, eastern Ethiopia and northern Somalia while others perished at sea. So far, no swarms have reached the Red Sea coastal plains where small-scale local breeding was underway in Yemen, Eritrea and Sudan. Nevertheless, breeding is expected to cause locust numbers to increase dramatically in the coming months on the Red Sea coast in Yemen and, to a lesser extent, in Eritrea, Sudan and Saudi Arabia. Small-scale breeding occurred in the Sahel in West Africa and along the Indo-Pakistan border, causing locust numbers to increase slightly. As seasonal rains have nearly stopped in the western and eastern regions and, as breeding ends, no significant developments are expected.

Western Region. The situation continued to remain calm during September. Small-scale breeding occurred in parts of southern and central **Mauritania**, in central **Niger** and in eastern **Chad**. Breeding is likely to have occurred in northern **Mali** and adjacent areas of Niger but surveys could not be carried out due to insecurity. As seasonal rains appear to have ended in the northern Sahel, further breeding is unlikely except in northeast Chad where ecological conditions remain unusually favourable and locusts could form a few small groups. No locusts were reported in northwest Africa.

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.
Telephone: +39 06 570 52420 (7 days/week, 24 hr)
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DLIS: www.fao.org/ag/locusts

Central Region. Locust infestations declined in the interior of **Yemen** as vegetation dried out and adult groups and swarms formed and moved into the highlands and southern coastal areas. Limited ground control operations were carried out and only small residual populations remained by the end of the month. Local breeding started on the Red Sea coast in Yemen where hatching occurred and a few hopper bands formed. Breeding will commence shortly in adjacent areas of **Saudi Arabia** where mature adults appeared in September. Groups of solitarious adults were laying eggs on the coast in **Eritrea** and **Sudan** that will hatch in October. Consequently, breeding has started along both sides of the Red Sea about a month or two earlier than in most years which should allow sufficient time for locust numbers to increase significantly if rains continue. Several very mobile immature and maturing swarms crossed the Gulf of Aden from southern Yemen and rapidly moved through **Djibouti** to eastern **Ethiopia** and east across northern **Somalia**. These locusts may persist in northern Somalia and slowly mature or perhaps move south into the Ogaden in November. Local breeding continued in northeast **Oman** where ground control operations were carried out against hopper groups.

Eastern Region. Small-scale breeding occurred in Rajasthan, **India** and along the border in the Cholistan Desert in **Pakistan**. Limited control operations were carried out in India. Rainfall declined in the summer breeding areas along both sides of the Indo-Pakistan border. As vegetation dries out and breeding ends, locust numbers will decline and scattered adults could move west towards Baluchistan, Pakistan.

Weather & Ecological Conditions in September 2007

Rains declined after the first decade in the summer breeding areas of the Sahel in West Africa and Sudan and along the Indo-Pakistan border. Although vegetation remained green in most areas, it was starting to dry out at the end of the month. Ecological conditions were favourable in the winter breeding areas along both sides of the Red Sea, especially in Yemen.

In the **Western Region**, the Inter-Tropical Convergence Zone (ITCZ) oscillated between 15N and 18N over West Africa during September. During the first decade, good rains fell in the summer breeding areas in southern and central Mauritania, northern Mali, Niger and Chad but less rain fell in parts of Tamesna in Mali and Niger. Rains also fell in northwest Mauritania (Inchiri and southwest Adrar) and the southern portion of Western Sahara as far north as Bir Anzarane where breeding conditions remained unfavourable, and in southern Algeria along the Malian border and west of Tamanrasset and Illizi. Very little rainfall occurred after mid-month in the Region. Vegetation was green in southern Mauritania as well as west of Tidjikja, in parts of Aftout Fai, and 100 km north of Aioun El Atrous and Oualata, but it was starting to dry out by the end of the month in the southeast. Vegetation was also green in the wadis of the Adrar des Iforas in northern Mali, in parts of the central Tamesna in Mali and Niger, in the western Air Mountains in Niger, in central Chad to 16N, and in southern Sahara of Algeria near Tamanrasset and along the Malian border near Bir Bou Mokhtar. Vegetation was unusually green in eastern Chad as far north as Fada and the Mourdi Depression. In northwest Africa, light rains may have fallen at times in northwest Libya but vegetation was dry.

In the **Central Region**, good rains fell during the first decade of September in the summer breeding areas of the interior of Sudan between Darfur and the Red Sea Hills and in the western lowlands in Eritrea. Thereafter, rainfall declined in these areas except for some showers near Khartoum and in western Eritrea. Breeding conditions remained extremely favourable in both countries except in the Baiyuda Desert in northern Sudan and in the northern portion of the western lowlands in Eritrea where vegetation was starting to dry out. Vegetation was also drying out in the summer breeding areas in the interior of Yemen except for Wadi Hadhramaut. In the winter breeding areas, very little rain fell on the Red Sea coastal plains in Sudan and Eritrea but green vegetation persisted between Massawa, Eritrea and Port Sudan. Good rains fell on the coast between Jizan, Saudi Arabia and Bab El Mandeb, Yemen where ecological conditions continued to be extremely favourable for breeding. Dry conditions prevailed along the coastal plains on both sides of the Gulf of Yemen except in the larger wadis and at the base of the foothills. Green vegetation was present on the plateau of eastern Ethiopia and northern Somalia, and in few places on the eastern side of the Wahiba Sands in northeast Oman.

In the **Eastern Region**, rainfall associated with the monsoon continued during the first decade of September along both sides of the Indo-Pakistan border. Thereafter, very little rain fell except in a limited area between Bikaner, India and Bahawalpur, Pakistan as the monsoon retreated south. Nevertheless, vegetation remained green in most areas in both countries.

Area Treated

Eritrea	1,100 ha (25-31 August)
India	225 ha (1-15 September)
Oman	260 ha (September)
Pakistan	880 ha (August)
Yemen	13,317 ha (August, revised)
	230 ha (1-24 September)

Desert Locust Situation and Forecast

(see also the summary on page 1)

WESTERN REGION

Mauritania

• **SITUATION**

During September, small-scale hatching occurred in parts of the summer breeding areas from eggs laid in August. Isolated solitarious hoppers of all instars and adults were present in Brakna and Tagant between Magta Lahjar (1730N/1305W) and N'Beika (1758N/1215W), in Hodh El Gharbi northeast of Aioun El Atrous (1639N/0936W), and in Hodh Ech Chargui near Timbedra (1614N/0809W). Isolated mature adults were also seen north of Oualata

(1717N/0701W) and appeared in Trarza near Rkiz (1658N/1514W), Boutilimit (1732N/1441W) and Aguilal Faye (1827N/1444W).

• **Forecast**

Locust numbers will increase slightly from current breeding in the south. Unless further rains occur, breeding will end and locusts are likely to concentrate in vegetation that remains green. Scattered locusts are expected to move to the northwest (Inchiri and southwest Adrar) and breed on a small-scale if more rainfall occurs.

Mali

• **Situation**

During September, surveys could not be carried out in the north due to insecurity and no locusts were reported.

• **Forecast**

Scattered adults are likely to be present and breeding north of Tombouctou and in parts of the northeast (Timetrine, Tilemsi Valley, Adrar des Iforas and Tamesna). Locust numbers will increase slightly from current breeding. Unless further rains occur, breeding will end and locusts are likely to concentrate in vegetation that remains green, mainly in the wadis in the Adrar des Iforas.

Niger

• **Situation**

Although no surveys could be carried out because of insecurity, there were reports of isolated immature and mature solitarious adults in Tamesna between Agadez (1700N/0756E) and In Gall (1651N/0701E), and near Arlit (1843N/0721E). Further south, small-scale breeding occurred southeast of Tanout (1505N/0850E) where isolated third and fourth instar solitarious hoppers and adults were present.

• **Forecast**

Scattered adults are likely to be present and breeding in parts of southern and central Tamesna and in the western Air Mountains. Locust numbers will increase slightly from current breeding there and near Tanout. Unless further rains occur, breeding will end and locusts are likely to concentrate in vegetation that remains green, mainly in the Air Mountains.

Chad

• **Situation**

During September, isolated solitarious mature adults were present in Kanem near Salal (1448N/1712E), in Biltine north of Iriba (1507N/2215E) and in Ennedi between Kalait (1550N/2054E) and Fada (1714N/2132E). Small-scale breeding occurred near Kalait where low numbers of solitarious hoppers of all instars were present. Egg laying was reported near Kalait and Fada after mid-month.

• **Forecast**

Locust numbers will increase as small-scale breeding continues in the northeast (Ennedi and Biltine) and to a limited extent in Kanem. As conditions start to dry out, locusts are likely to concentrate in the remaining green vegetation and could form a few small groups.

Senegal

• **Situation**

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

• **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 September, no locusts were seen during surveys carried out in the southern Sahara west of Djanet (2434N/0930E), near Tamanrasset (2250N/0528E) and along the Malian border near Bir Bou Mokhtar (2120N/0056E).

• **Forecast**

Isolated adults may be present in the south near Tamanrasset and Bir Bou Mokhtar and breed on a small scale in areas of previous rainfall.

Morocco

• **Situation**

No locusts were reported during September.

• **Forecast**

Isolated adults may appear in the extreme south of Western Sahara in areas of recent rainfall near Ma'Tallah.

Libyan Arab Jamahiriya

• **Situation**

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

• **Forecast**

No significant developments are likely.

Tunisia

• **Situation**

No surveys were carried out and no locusts were reported during August and September.

• **Forecast**

No significant developments are likely.

CENTRAL REGION

Sudan

• **Situation**

During September, small-scale breeding occurred in Northern Kordofan between Sodiri (1423N/2906E) and Umm Saiyala (1426N/3112E) where scattered solitarious hoppers and immature and mature adults were present at densities up to 300 adults/ha. Isolated hoppers were seen in the Baiyuda Desert northwest of Khartoum, and scattered mature adults were present near Atbara (1742N/3400E) and Kassala (1527N/3623E). Groups of mature solitarious, *transiens* and gregarious adults were present at densities up to 1,350 adults/ha along the western side of the Red Sea Hills from Derudeb (1731N/3607E) to Tomala (2002N/3551E) in Wadi Oko and on the Red Sea coast in the Tokar Delta and near Port Sudan. Some of these adults were laying eggs.

• Forecast

Locust numbers will increase slightly from current breeding in North Kordofan, Northern and Kassala States and most likely in West and North Darfur. Unless further rains occur, breeding will end but there is a moderate risk that groups could form along the Atbara River and on the western side of the Red Sea Hills and breed again. Locust numbers will increase in the winter breeding areas along the Red Sea coast and in Wadi Oko/Diib as adults arrive from the interior, mature and lay eggs. Hatching will occur on the coast from October onwards.

Eritrea

• **Situation**

In the summer breeding areas of the western lowlands, ground control teams treated 1,100 ha of scattered second to fifth instar solitarious hoppers, fledglings and *transiens* adults in the western lowlands near Kerkebet (1618N/3724E) during the last week of August. Only a few solitarious mature adults remained a month later.

In the winter breeding areas along the Red Sea coast, locust numbers continued to increase during September between Sheib (1551N/3903E) and Karora (1745N/3820E). From the first week onwards, scattered solitarious and gregarious adults, at densities up to 15,000 adults/ha, laid eggs throughout this area, including a few wadis at the foot of the escarpment near Naro (1626N/3840) where laying had occurred earlier and first to third instar solitarious hoppers were already present near crops.

• **Forecast**

Locust infestations will decline further in the western lowlands but increase on the Red Sea coastal plains. Small-scale breeding is expected to extend to most coastal areas between Massawa and Karora with hatching occurring throughout the forecast period. There is a slight risk that hoppers could form a few small groups in places where concentrated laying occurred. A few small swarms could appear from Yemen early in the forecast period.

Ethiopia

• **Situation**

From 21-25 September, at least one immature swarm appeared near the Djibouti border and Aysha (1045N/4237E) and along the border of northern Somalia near Teferi Ber (0947N/4313E).

• **Forecast**

A few small swarms could appear from Yemen early in the forecast period near the borders of Djibouti and northern Somalia. Some of these could remain between Dire Dawa and Jijiga and slowly mature. There is a slight risk that a few groups or swarms could move from northern Somalia to the Ogaden towards the end of the forecast period.

Djibouti

• **Situation**

On 16 September, a medium-density maturing swarm arrived on the coast near Tadjourah (1147N/4253E) but then departed shortly thereafter.

• **Forecast**

A few small swarms could appear from Yemen early in the forecast period.

Somalia

• **Situation**

During September, there were several unconfirmed reports of swarms on the plateau north of Gebiley (0941N/4337E) and Hargeisa (0931N/4402E) at the end of the second week. An immature swarm of about 80-100 locusts/tree was reported about 500 km to the east near Iskushuban (1017N/5014E) on the 16th. During the following week, immature and mature solitarious and gregarious adults were scattered throughout the plateau between Boroma

(0956N/4313E) and Erigavo (1040N/4720E), and hoppers were seen in one area. Some of these adults may have been leftover from the earlier swarms. On the 23rd, an immature swarm was seen flying from the north at high altitude in the afternoon at Hargeisa where it settled nearby and covered about 4 km^2 with a density of 45 adults/m^2. On the 24th, a swarm was seen in the northeast near Gardo (0930N/4905E).

• **Forecast**

Scattered adults are likely to persist and breed on a small scale on the plateau between Boroma and Erigavo in areas of recent rainfall. Hatching could occur from October onwards. There is a moderate risk that a few swarms could arrive on the plateau from Yemen early in the forecast period and move east towards Erigavo and Gardo where they could mature and lay eggs that would hatch during the forecast period.

Egypt

• **Situation**

No locusts were seen during surveys carried out in mid-September along both sides of Lake Nasser near Abu Simbel (2219N/3138E), Tushka (2247N/3126E) and W. Allaqi.

• **Forecast**

Scattered adults could appear in the southeast on the Red Sea coastal plains between Shalatyn and Halaib and, if rainfall occurs, lay eggs that could hatch by the end of the forecast period.

Saudi Arabia

• **Situation**

During September, scattered mature solitarious and *transiens* adults appeared in several places on the southern Red Sea coast near Jizan (1656N/4233E). In the Asir Mountains, isolated mature solitarious adults were seen in crops near Khamis Mushait (1819N/4245E). No locusts were seen on the coast near Qunfidah (1909N/4107E) and between Jeddah and Rabigh (2247N/3901E), or in the interior.

• **Forecast**

Locust numbers will increase as hatching occurs on the Red Sea coast near Jizan and perhaps near Qunfidah. There is a slight risk that a few swarms could arrive in these areas from Yemen in October.

Yemen

• **Situation**

During September, more laying occurred in the interior in Wadi Hadhramaut at the beginning of the month and near Bayhan (1452N/4545E) towards the end. Solitarious, *transiens* and gregarious hopper infestations and mature adult groups were present near Ataq (1435N/4649E) and Shabwah (1522N/4700E). Groups of mature adults were also present between Al Abr (1608N/4714E) and Minwakh (1650N/4812E), and in W. Hadhramaut, and solitarious mature adults were reported in Al Jawf near Al Hazm (1609N/4447E). As vegetation dried out in the interior, several immature swarms formed during the first week and moved west towards the highlands where they were seen between Al Baydha (1405N/4542E) and Ad Dali (1341N/4443E). Although one swarm was seen west of Sana'a, adult groups and swarms did not reach the Red Sea coast but probably dispersed within the central and southern highlands. Immature swarms also moved south from Hadhramaut towards the Gulf of Aden coast where they were seen near Mukalla (1431N/4908E), Ahwar (1333N/4644E), Aden (1250N/4503E) and Bab El Mandab during the second and third weeks. During the second week, fishermen near Aden saw large numbers of dead immature gregarious adults off the coast and washed up on shore, indicating that some swarms were crossing the sea. Egg laying was reported on the plains west of Aden on the 20th. By the end of the month, infestations had declined in the interior. Control operations treated 230 ha from 1-26 September.

On the Red Sea coastal plains, hatching commenced in several places between Bayt Al Faqih (1430N/4317E) and the Saudi Arabian border near Midi (1619N/4248E) and scattered solitarious hoppers and adults were present. By the end of the month, hoppers had formed very small low-density bands near Suq Abs (1600N/4312E) and groups at densities of 4-25 hoppers/m^2 south of Hodeidah. Adult groups laid eggs throughout the month.

• **Forecast**

Hatching is expected to occur in the interior near Bayhan early in the forecast period and hoppers could form small groups and bands. A few more adult groups and swarms could form from the remaining infestations in the interior and move towards the southern coast or into the central highlands. On the southern coast, residual populations could breed near Aden with hatching and limited band formation from October onwards. On the Red Sea coast, locust numbers will increase as breeding continues and extends to other areas between Bab El Mandeb and Midi. Small hopper groups, bands and adult groups are likely to form in places. There is a moderate risk that a few adult groups or swarms could arrive on the Tihama in October.

Oman

• **Situation**

In early September, local breeding continued in the Sharqiya region of the northeast where late instar solitarious and *transiens* hoppers mixed with a few immature solitarious adults were present on the edge of the Wahiba Sands mainly between Ibra (2243N/5831E) and the coast. By the second week, locust numbers had increased slightly and some immature adults were forming small groups. At the end of the month, control teams treated 260 ha of solitarious and *transiens* hopper groups of all instars mixed with solitarious adults in Wadi Al Ameiri (2141N/5613E) in Dhahira region. No locusts were reported in the south near Yemen or elsewhere in the country.

• **Forecast**

Low numbers of locusts may persist in Sharqiya in any areas that remain green.

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 reports were received during September.

• **Forecast**

Small-scale breeding may have occurred in September on the southeast coast near Chabahar. If so, locusts may persist in those areas that remain green, especially on the Vashnum Plains.

Pakistan

• **Situation**

A late report indicated that control teams treated 880 ha of solitarious first to fourth instar hoppers west of Karachi near Uthal (2548N/6637E) in August. During the second half of the month, scattered immature and mature adults at densities up to 300 adults/ha persisted at 39 places near the Indian border in Khairpur and Cholistan.

During September, the number of places with locusts declined and only scattered solitarious adults and a few hoppers persisted near the Indian border southeast of Rahimyar Khan (2822N/7020E). In the Uthal area, solitarious adult densities increased to 1,000 adults/ha.

• **Forecast**

Breeding will end along the border with India and locust numbers will decline in Cholistan and Khairpur as adults leave the area and move west towards Baluchistan. Low numbers of locusts may persist in the Uthal area.

India

• **Situation**

During September, low numbers of solitarious mature adults were present in a few places of Rajasthan between Phalodi (2706N/7222E) and Bikaner (2801N/7322E) where local breeding had occurred in August. Isolated mature adults were also seen at one place in northwest Gujarat. Control operations were undertaken during the second week at 13 places near Phalodi against solitarious and *transiens* mature adults, treating 225 ha.

• **Forecast**

Breeding will end in Rajasthan and locust numbers are expected to decline as most of the adults move towards the west. Some adults could persist and concentrate in those areas that remain green and perhaps form a few small groups.

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 within 48 hours of the last survey. Affected countries are also encouraged to prepare decadal bulletins summarizing the situation. All information should be sent by e-mail to the FAO/ECLO Desert Locust Information Service (eclo@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*, orange for *threat* 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) provides 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. New information has been added to the Locust Group's web page, Locust Watch (www.fao.org/ag/locusts):

- **Locust situation.** Several updates during September (home page and in Archives section)
- **EMPRES/CR.** Report of 4th ad-hoc Emergency prevention consultation (Publications section)
- **FAO Technical Series.** No. 34 – Review of the efficacy of *Metarhizium anisopliae* var. *acridum* (Publications section)
- **Guidelines.** *Metarhizium* field trials (Publications section)

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

2007 events. The following meetings are scheduled:

- **CLCPRO**. 4th Executive Committee (18-19 October) and 4th Session (22-26 October), Bamako (Mali)
- **EMPRES/WR**. RAMSES and eLocust2 evaluation workshop (10-12 November), Algiers (Algeria)
- **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 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.

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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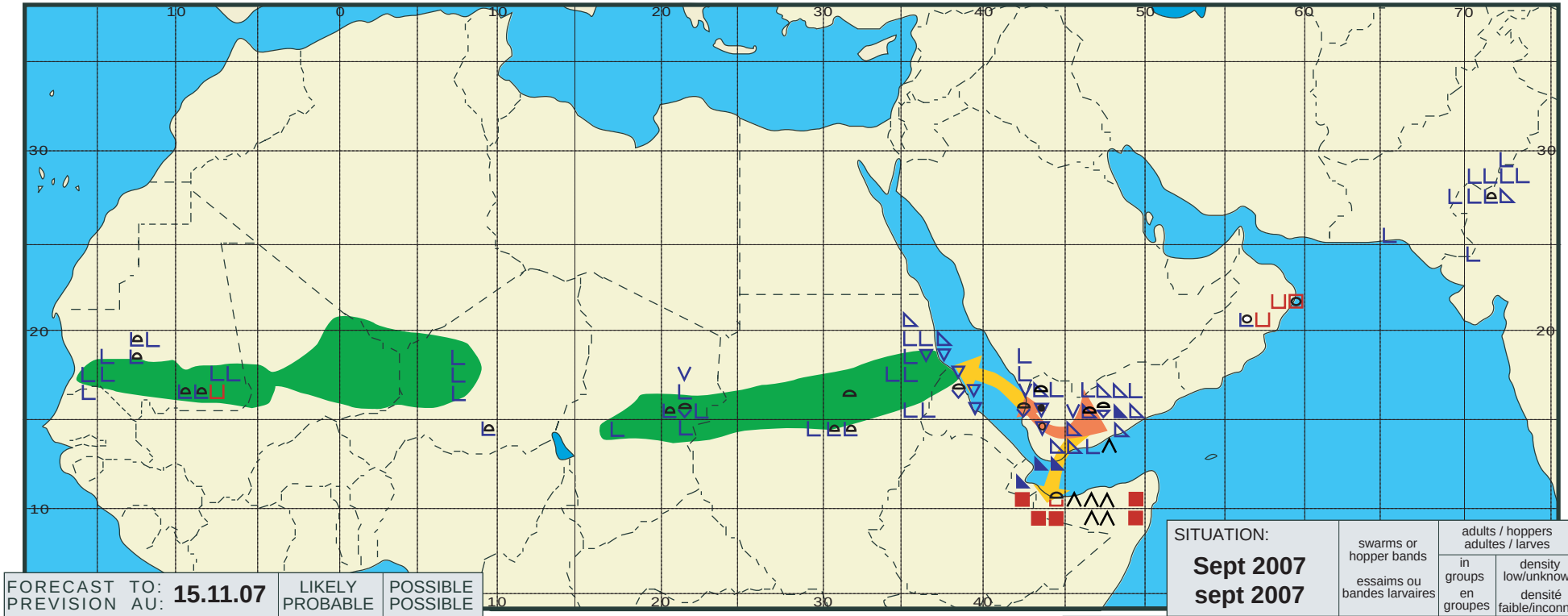

FORECAST TO: PREVISION AU: **15.11.07**	LIKELY PROBABLE	POSSIBLE POSSIBLE
favourable breeding conditions conditions favourables à la reproduction		
major swarm(s) essaim(s) important(s)		
minor swarm(s) essaim(s) limité(s)		
non swarming adults adultes non essaimant		

SITUATION: **Sept 2007 sept 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	◣	◺	L
adults, maturity unknown adultes, maturité inconnue	▲	△	∧
egg laying or eggs pontes ou œufs	▼	▽	V
hoppers larves	●	○	⌓
hoppers & adults (combined symbol example) larves et adultes (exemple symboles combinés)	◘	◙	⊎