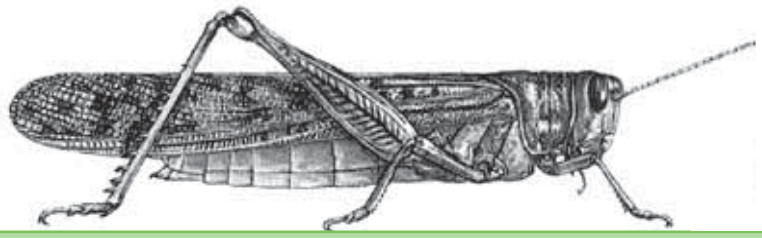

warning level: **CALM**

DESERT LOCUST BULLETIN

FAO Emergency Centre for Locust Operations

No. 400

(2 Feb 2012)

General Situation during January 2012 Forecast until mid-March 2012

The Desert Locust situation continued to remain calm in January. Small-scale breeding occurred in parts of southeast Algeria, southwest Libya and northern Niger. Limited ground control operations were carried out in Algeria. Very few locusts were present in the winter breeding areas along both sides of the Red Sea and Gulf of Aden because of poor rainfall and dry vegetation. Only scattered adults were reported in Sudan and Saudi Arabia. During the forecast period, breeding will end in the winter breeding areas but limited breeding could continue along the Algerian-Libyan border and in northern Niger. Close monitoring is required in these three countries. Spring breeding may commence in Baluchistan of western Pakistan and southeast Iran if good rains fall in February and March. No significant developments are likely.

Western Region. Mainly dry conditions prevailed during January and very little rain fell except in **Niger** and in the northern Sahara in **Algeria**. Very localized small-scale breeding occurred in southwest **Libya** and, to a lesser extent, in southeast Algeria and northern Niger. Small patches of gregarious hoppers formed in Libya and control operations were being organized. In Algeria, ground teams treated 85 ha. Elsewhere, isolated adults may be present in parts of northwest **Mauritania** and in northern **Mali** but surveys were not carried out to confirm this. During the forecast period, breeding may continue in currently infested areas although more rains must fall before locusts increase in number. All efforts are required to monitor the situation closely in Algeria, Libya and Niger.

Central Region. Low numbers of solitarious adults persisted during January in a few places of the winter breeding areas along both sides of the Red Sea in **Sudan** and **Saudi Arabia**. Similar populations may be present in coastal areas of **Eritrea**, **Yemen** and eastern **Oman**. No locusts were reported in **Egypt**, **Ethiopia** and northern **Somalia**. During the forecast period, small-scale breeding may occur during February along both sides of the Red Sea and on the eastern coast of Oman but this will decline from March onwards unless further rains fall. No significant developments are likely in the region.

Eastern Region. Dry conditions prevailed throughout the region during January. Isolated solitarious adults were seen at one place on the coast in western **Pakistan**. Small-scale breeding is likely to take place in the spring breeding areas of western Pakistan and southeast **Iran** if light to moderate rains fall during the forecast period. Nevertheless, locust numbers will remain low and below threatening levels. No locusts were seen during routine surveys in western **India**. No significant developments are likely in the region.

The FAO Desert Locust Bulletin is issued every month by the Desert Locust Information Service, AGP Division (Rome, Italy). It is supplemented by Alerts and Updates during periods of increased Desert Locust activity. All products are distributed by e-mail and are available on the Internet.
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No. 400

DESERT LOCUST BULLETIN

Weather & Ecological Conditions in January 2012

Although very little rain fell during January, ecological conditions remained favourable for limited breeding in parts of Algeria, southwest Libya, northern Niger, the Red Sea coast in Sudan and Saudi Arabia, and the eastern coast in Oman.

In the **Western Region**, very little rain fell during January and temperatures were low throughout the northern Sahel and the Sahara. During the second decade, light rain fell in the northern Sahara between Bechar, Algeria and Ghadames, Libya. Good rains also fell on the western edge of the Ténéré Desert north of Adrar Madet in northern Niger. As a result, ecological conditions may become favourable for breeding in the above-mentioned areas. In Algeria, breeding conditions remained favourable in the southern Sahara west and southeast of the Hoggar Mountains and in the central Sahara near agricultural areas of Adrar. Elsewhere in the region, ecological conditions remained generally dry and unfavourable for breeding except for a few localized areas of green vegetation in central and northwest Mauritania and in Timetrine and southern Tamesna in Mali.

In the **Central Region**, very little rain fell during January in the winter breeding areas along both sides of the Red Sea and Gulf of Aden where mainly dry conditions prevailed. Nevertheless, vegetation continued to be green in the Tokar Delta in Sudan and on the central Red Sea coast near Qunfidah, Saudi Arabia from earlier rains. Light rain fell over the southern coast in Sudan in mid-January and vegetation was greening up between Aqiq and Karora. Vegetation was also becoming green on the central coast in Eritrea (Akbanazouf Plain and runoff areas south of Embere) but remained dry in southeast Egypt (Shalatyn to Halaib), elsewhere in Sudan and Saudi Arabia, and on the escarpment and plateau in northern Somalia. Local areas of green vegetation were probably present along parts of the Red Sea coast in Yemen. Although only light showers may have fallen during the second decade of January in central Oman between Marmul and Hayma, ecological conditions remained favourable for limited breeding along the eastern coast between Sur and Jazeer from rains that fell in late October and early November.

In the **Eastern Region**, no significant rain fell during January in the spring breeding areas of Baluchistan in western Pakistan and southeast Iran. Consequently, mainly dry conditions prevailed except for a few places along the southeastern coastal plains in Iran where vegetation was becoming green near Jask and Chabahar.

Area Treated

Algeria	85 ha (January)

Desert Locust Situation and Forecast

(see also the summary on page 1)

WESTERN REGION

Mauritania

• **SITUATION**

No surveys were carried out and no locusts were reported in January.

• **FORECAST**

Isolated adults may be present in parts of northern Trarza, Inchiri and southwest Adrar where breeding is unlikely unless good rains occur during the forecast period.

Mali

• **SITUATION**

No surveys were carried out and no locusts were reported in January.

• **FORECAST**

Low numbers of adults may be present and could persist in the few areas that remain green in the north. No significant developments are likely.

Niger

• **SITUATION**

During the second half of January, isolated third to fifth instar solitarious hoppers and fledglings were seen at two places in the western Ténéré Desert northwest of Fachi (1806N/1134E), and scattered immature solitarious and *transiens* adults at densities up to 700 adults/ha were seen at four places. A few individual *transiens* hoppers were reported at one location. Isolated immature adults were seen on the edge of the Ténéré near Adrar Madet (1843N/1022E). In the eastern Air Mountains, isolated third instar solitarious hoppers and immature adults were present

at one place northeast of Timia (1809N/0846E).

• **Forecast**

Low numbers of adults will persist in the Air Mountains and the western edge of the Ténéré where small-scale breeding could occur in areas of recent rainfall, causing locust numbers to increase.

Chad

• **Situation**

No surveys were carried out and no locusts were reported in January.

• **Forecast**

No significant developments are likely.

Senegal

• **Situation**

No surveys were carried out and no locusts were reported in January.

• **Forecast**

No significant developments are likely.

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

• **Forecast**

No significant developments are likely.

Algeria

• **Situation**

During January, fifth instar hoppers at densities of 3-6 hoppers/bush and immature solitarious and *transiens* adults at densities of 400-700 adults/ha were present at one place about 130 km west of Djanet (2434N/0930E) in the Bordj El Haoues area. Ground teams treated 85 ha. No locusts were seen during surveys carried out near Adrar (2753N/0017W), Tindouf (2741N/0811W), and northeast of Tamanrasset (2250N/0528E).

• **Forecast**

Scattered adults are likely to persist in areas that remain green near Illizi and Djanet. If further rains fall, small-scale breeding will occur, causing locust numbers to increase and perhaps a few small groups to form.

Morocco

• **Situation**

No surveys were carried out and no locusts were reported in January.

• **Forecast**

Isolated adults may be present in the extreme south of the Western Sahara. Low numbers of adults could appear south of the Atlas Mountains in the Draa and adjacent valleys during March. No significant developments are likely.

Libya

• **Situation**

In early January, small patches of second to fourth instar *transiens* and gregarious hoppers were seen in three wadis in the southwest near the Algerian border about 65 km northwest of Ghat (2459N/1011E). Hopper densities varied from 200-400 hoppers/bush to 3-5 hoppers/m^2 and infested areas were 100-300 m^2 in size. The infestations are a result of local breeding that occurred at the end of last year. All efforts are underway to try to carry out the necessary survey and control operations.

• **Forecast**

Scattered adults are likely to persist in areas that remain green near Ghat, concentrate and form small groups or move northwards to Ghadames and Al Hamada Al Hamra. If rains fall during the forecast period, small-scale breeding could occur, causing locust numbers to increase and small groups to form.

Tunisia

• **Situation**

No surveys were carried out and no locusts were reported in January.

• **Forecast**

No significant developments are likely.

CENTRAL REGION

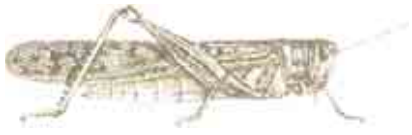
Sudan

• **Situation**

During January, mature solitarious adults were present, at densities up to 150 adults/ha, at a few places on the Red Sea coast in the Tokar Delta and on the southern plains near Aqiq (1813N3811E) and Aiterba (1753N/3819E) as well as on the western side of the Red Sea Hills east of Tomala (2002N/3551E). No locusts were seen north of Tomala in Wadi Diib/ Oko.

• **Forecast**

Small-scale breeding may occur in areas of green vegetation on the southern coast between Suakin and the Eritrean border, including the Tokar Delta, during February. Unless further rains fall, breeding is less likely to occur in the north, and will come to an end in the south from March onwards. No significant developments are likely.



Eritrea

• **Situation**

No reports were received during January.

• **Forecast**

Low numbers of adults are likely to be present along parts of the Red Sea coastal plains between Massawa and the Sudanese border. Unless further rains fall, breeding is not expected to occur.

Ethiopia

• **Situation**

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

• **Forecast**

No significant developments are likely.

Djibouti

• **Situation**

No reports were received during January.

• **Forecast**

No significant developments are likely.

Somalia

• **Situation**

In January, no locusts were seen during a survey on the escarpment and plateau between Boroma (0956N/4313E), Burao (0931N/4533E) and the Ethiopian border.

• **Forecast**

Small-scale breeding could occur on the northwest coast if rain falls during the forecast period. No significant developments are likely.

Egypt

• **Situation**

During January, no locusts were seen on the Red Sea coast between Abu Ramad (2224N/3624E) and Halaib (2213N/3638E), in the Red Sea Hills west of Berenice (2359N/3524E), along the Lake Nasser shoreline near Abu Simbel (2219N/3138E) and Tushka (2247N/3126E), and in the northwest on the Mediterranean coast near Salum (3131N/2509E).

• **Forecast**

Isolated adults may appear on the Red Sea coastal plains between Shalatyn and Halaib. If rains occur, small-scale breeding will cause locust numbers to increase slightly but remain below threatening levels.

Saudi Arabia

• **Situation**

During January, isolated immature solitarious adults were seen at a few places on the Red Sea coast near Qunfidah (1909N/4107E). No locusts were seen elsewhere on the coast near Jeddah (2130N/3910E) and Lith (2008N/4016E) or in the interior.

• **Forecast**

Isolated adults are likely to persist near Qunfidah. Unless further rains fall, breeding is not expected to occur along the Red Sea coastal plains.

Yemen

• **Situation**

No reports were received during January.

• **Forecast**

Low numbers of adults are likely to be present along parts of the Red Sea coastal plains. Unless further rains fall, breeding is not expected to occur.

Oman

• **Situation**

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

• **Forecast**

Low numbers of adults may be present along parts of the eastern coast between Jazeer and Sur and along the eastern edge of the Wahiba Sands. Small-scale breeding could occur in areas of previous rainfall or if more rains fall during the forecast period.

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

• **Forecast**

No significant developments are likely.

EASTERN REGION

Iran

• **Situation**

During January, no locusts were seen on the southeastern coast from Jask (2540N/5746E) to the Pakistani border.

• **Forecast**

Low numbers of locusts may appear on the southeastern coastal plains between Jask and Chabahar, and breed on a small scale in areas that receive rainfall.

Pakistan

• **Situation**

During the first half of January, isolated mature solitarious adults were seen on the coast of Baluchistan near Uthal (2548N/6637E).

• Forecast

Low numbers of locusts will persist near Uthal and

may appear in other coastal areas between Jiwani and Ormara, and breed on a small scale if rainfall occurs.

India

• **Situation**

No locusts were seen during surveys carried out in Rajasthan and Gujarat in January.

• **Forecast**

No significant developments are likely.

Afghanistan

• **Situation**

No reports received.

• **Forecast**

No significant developments are likely.

Announcements

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.

Locust reporting. During calm (green) periods, countries should report at least once/month and send RAMSES data with a brief interpretation. During caution (yellow), threat (orange) and danger (red) periods, often associated with locust outbreaks, upsurges and plagues, RAMSES output files with a brief interpretation should be sent at least twice/week within 48 hours of the latest 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.

Locust tools and resources. FAO has developed a number of tools that National locust information officers and other interested individuals can use for Desert Locust early warning and management:

- **MODIS.** Vegetation imagery every 16 days (http://iridl.ldeo.columbia.edu/maproom/.Food_Security/.Locusts/.Regional/.MODIS/index.html)
- **RFE.** Rainfall estimates every day, decade and month (http://iridl.ldeo.columbia.edu/maproom/.Food_Security/.Locusts/index.html)
- **Greenness maps.** Dynamic maps of green vegetation evolution every decade (http://www.devcocast.eu/user/images/dl/Form.do)
- **FAODLIS Google site.** A platform for sharing problems, solutions, tips and files for eLocust2, eLocust2Mapper, RAMSES and remote sensing (https://sites.google.com/site/faodlis)
- **FAOLOCUST Twitter.** The very latest updates are posted on Twitter (http://twitter.com/faolocust)
- **FAOLocust Facebook.** A social means of information exchange using Facebook (http://www.facebook.com/pages/FAOLocust/314165595289302)
- **Slideshare.** Locust presentations and photos available for viewing and download (http://www.slideshare.net/faolocust)
- **eLERT.** A dynamic and interactive online database of resources for locust emergencies (http://sites.google.com/site/elertsite)

SWAC website. A new website for the FAO Commission for Controlling the Desert Locust in South-West Asia (SWAC) is now available at http://www.fao.org/ag/locusts/SWAC. Comments are welcome.

New information on Locust Watch. Recent additions to the web site (www.fao.org/ag/locusts) are:

- **Desert Locust situation updates.** Archives Section – Briefs
- **Contacts.** Information Section – Contacts

2012 events. The following activities are scheduled or planned:

- **CLCPRO.** 6th Session and 7th Executive Committee meeting, Tunis, Tunisia (26-31 March)
- **SWAC/CRC.** Inter-regional national locust information officer workshop, Cairo, Egypt (17-18 April)
- **CRC.** 7th Sub-regional training course, Amman, Jordan (6-15 May)
- **DLCC.** 40th Session (tbc)
- **SWAC.** 28th Session, New Delhi, India (December, tbc)

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DESERT LOCUST BULLETIN

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.

ORANGE

- Threat. Threat to crops. Survey and control operations must be undertaken.

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

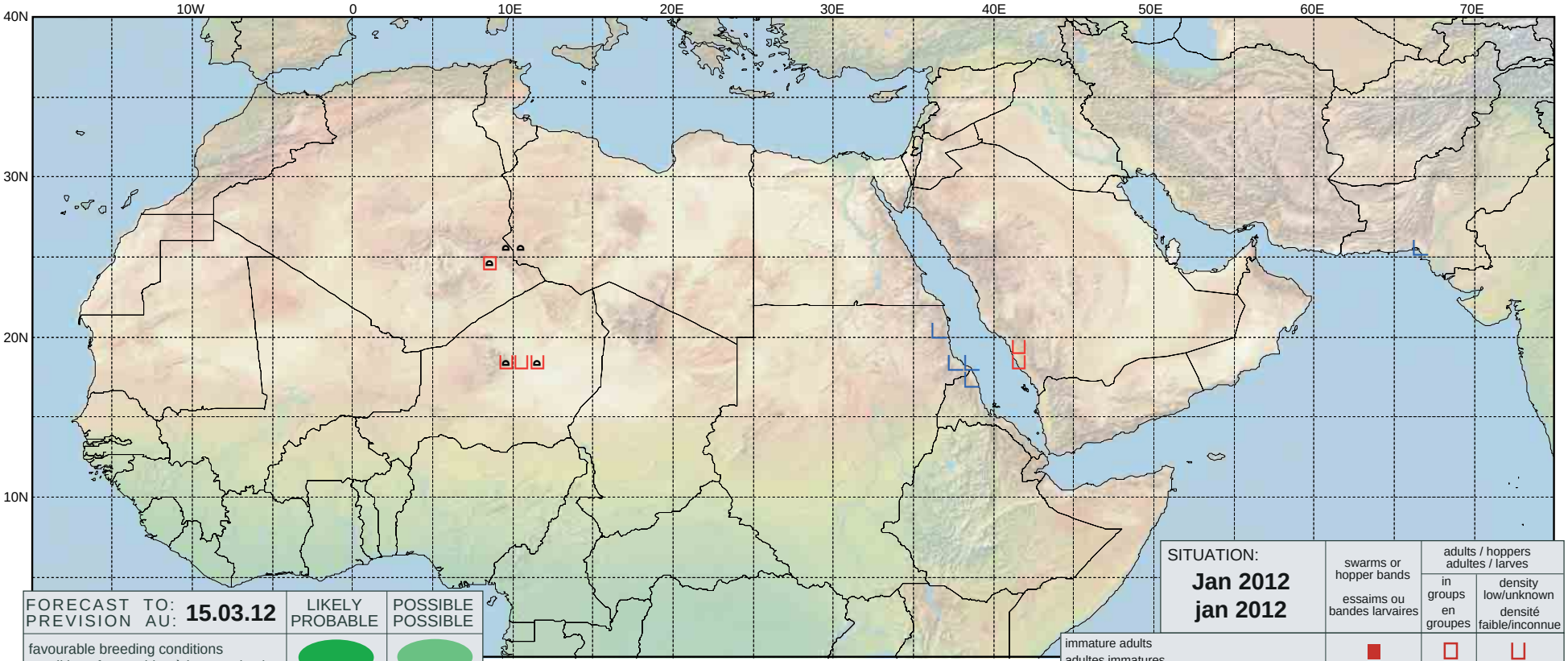
only: Bahrain, Iraq, Israel, Jordan, Kenya, Kuwait, Qatar, Syria, Tanzania, Turkey, UAE and Uganda.

EASTERN

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

Desert Locust Summary
Criquet pèlerin - Situation résumée

400



FORECAST TO: / PREVISION AU: **15.03.12**	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: **Jan 2012** / **jan 2012**	swarms or hopper bands essaims ou bandes larvaires	adults / hoppers adultes / larves: in groups / en groupes	adults / hoppers adultes / larves: 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)	◘	◙	⌾