

warning level: **CALM**

DESERT LOCUST BULLETIN

FAO Emergency Centre for Locust Operations



No. 376

(3 Feb 2010)



General Situation during January 2010 Forecast until mid-March 2010

The Desert Locust situation remained calm in all countries during January. Ecological conditions are less favourable than normal in the winter breeding areas along both sides of the Red Sea because of poor rainfall. Consequently, only insignificant numbers of locusts were present on the coast of Egypt, Sudan and Yemen. Although small-scale breeding occurred in northwest Mauritania and in Niger where scattered solitarious adults were present, locust numbers remained below threatening levels. A few locusts were also reported in northeast Morocco and in southern Algeria. No significant developments are likely during the forecast period.

Western Region. The locust situation remained calm during January throughout the Region. Scattered solitarious adults were present in northwest and northern Mauritania, and limited breeding took place in the few areas that remained green. Low numbers of locusts will persist and limited hatching could occur during the forecast period. In Niger, scattered adults moved from the Tamesna Plains to the Air Mountains where favourable ecological conditions could allow small-scale breeding in the coming months. A few adults probably also moved north into southern Algeria where isolated adults were reported near the Niger border. Isolated adults were also present in northeast Morocco. During the forecast period, low numbers of adults are likely to move into the central Sahara in Algeria and along the southern side of the Atlas Mountains in Morocco. Once temperatures warm

up and if good rains fall, small-scale breeding could take place in these areas but locust numbers will remain low.

Central Region. The locust situation remained calm during January because of poor rainfall in the winter breeding areas along both sides of the Red Sea. Small-scale breeding occurred on the coast of Egypt near the Sudanese border. Scattered adults were present on the coast of Sudan, mainly near the Eritrean border, and on the coast of Yemen. Unless further rains fall, locust populations will decline along both sides of the Red Sea, and no significant developments are likely.

Eastern Region. No locusts were reported in the region during January. Light rains fell along the coast in the spring breeding areas of southeast Iran and western Pakistan. Low numbers of adults are likely to appear in these areas and breed on a small scale if more rains fall during the forecast period. Regular surveys are recommended in both countries to monitor the situation from February onwards.

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 made available on the Internet.

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Weather & Ecological Conditions in January 2010

As very little rain fell in the Desert Locust recession area during January, ecological conditions remained generally unfavourable for breeding in the winter areas along both sides of the Red Sea.

In the **Western Region**, no significant rain fell in the Desert Locust recession area during January. Consequently vegetation continued to dry out in northwest and northern Mauritania, but ecological conditions remained sufficiently favourable for locust survival and limited breeding mainly in the wadis and other low-lying areas of Inchiri, Adrar and Tiris Zemmour. In Niger, green vegetation and standing water from earlier rainfall were present in some places on the eastern side of the Air Mountains where conditions were favourable for breeding. Vegetation was also green in central and western Air but was drying out on the Tamesna Plains because of a lack of recent rainfall. In Morocco, annual vegetation remained green on the southern and southeastern sides of the Atlas Mountains in the Ziz-Ghris Valley and near Figuig and the Algerian border. In Algeria, favourable ecological conditions persisted in the extreme south near the borders of Mali and Niger but remained dry in the west near Tindouf. Elsewhere in the Region, conditions were dry.

In the **Central Region**, very little rain fell in the winter breeding areas along both sides of the Red Sea and Gulf of Aden during January. In Sudan, light showers fell at times on the Red Sea coast during the first half of the month and ecological conditions were favourable for breeding primarily in the Tokar Delta and on the coastal plains between Aiterba and the Eritrean border. In Eritrea, light to moderate rains fell on the central Red Sea coast for a few days during the last decade of the month. Vegetation was green or becoming green on the central coast near Sheib and the Akbanazouf Plain but was dry further north near Afabet. In Egypt, vegetation was mainly dry in most areas except on the Red Sea coastal plains between Abu Ramad and the Sudanese border. Heavy rains and flooding occurred in parts of the Sinai Peninsula as well as near Aswan, Egypt on 18-20 January;

however, this is not likely to have an impact on locust populations. In Saudi Arabia, light to moderate rain fell in the northern interior and on the northern coast of the Red Sea near Al Wejh. Further south, vegetation was becoming green on the coast near Rabigh. In Yemen, light to moderate showers fell in a few places along the Red Sea coastal plains in early January; nevertheless, ecological conditions were generally dry. Although light rains fell at times on the northwest coast of Somalia, vegetation remained dry there as well as on the plateau. In Oman, light showers fell at times, mainly in the north and vegetation was becoming green along the northern Batinah coast and in the northern interior areas of Dhahira and Dakhliya.

In the **Eastern Region**, light rain fell during January in parts of the spring breeding areas in western Pakistan and southeast Iran. Most of the rain fell along the coast of Baluchistan between Jask, Iran and Pasni, Pakistan, while some showers also occurred in the interior near Panjgur, Pakistan. Consequently, ecological conditions were improving in most coastal areas. Light rain also fell in parts of Rajasthan, India where vegetation remained dry.



Area Treated

No control operations were reported during January.



Desert Locust Situation and Forecast

(see also the summary on page 1)

WESTERN REGION

Mauritania

• SITUATION

During January, small-scale breeding continued in parts of the northwest and north where mainly isolated late instar solitarious hoppers were present in a few places near Akjoujt (1945N/1421W), Oujeft (2003N/1301W), Chinguetti (2027N/1221W) and Zouerate (2244N/1221W). Scattered solitarious immature and mature adults at densities less than 600 adults/ha were seen in these areas as well as east of Nouakchott, between Atar (2032N/1308W) and Ouadane (2056N/1137W) and in the extreme north near Bir Moghreïn (2510N/1135W). Limited egg laying was reported near Oujeft and Chinguetti.

• FORECAST

Low numbers of solitarious adults will persist in parts of the north and west of the country. Limited hatching will occur in parts of Inchiri and Adrar but

locust numbers will remain below threatening levels. During periods of warm southerly winds, scattered adults may move towards the north.

Mali

• SITUATION

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

• FORECAST

Low numbers of adults are likely to be present and will persist in parts of the Adrar des Iforas.

Niger

• SITUATION

During the second half of January, isolated solitarious immature adults were seen in a few wadis in southeastern Air Mountains to the south and east of Timia (1809N/0846E). Isolated fourth instar solitarious hoppers were also seen at one place.

• Forecast

Low numbers of adults are expected to persist in the east and southeast of the Air Mountains where they will mature and could breed on a small-scale in areas that remain favourable, especially if more rains fall.

Chad

• SITUATION

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

• FORECAST

No significant developments are likely.

Senegal

• SITUATION

No reports were received during 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, isolated immature and mature solitarious adults persisted in the extreme south near In Guezzam (1937N/0552E) and the Niger border. No locusts were seen during surveys carried out in the south near Tamanrasset (2250N/0528E) and Bir Bou Mokhtar (2120N/0056E).

• FORECAST

Low numbers of locusts are expected to persist in the southern Sahara while scattered adults could

move from the south and appear in the central and northwest Sahara and breed on a small scale as temperatures warm up during the forecast period.

Morocco

• SITUATION

During January, isolated immature and mature solitarious adults were present in a few places in the northeast on the southeastern side of the Atlas Mountains near Figuig (3207N/0113W) and the Algerian border. No locusts were reported elsewhere.

• FORECAST

Low numbers of adults will persist on the southern and southeastern side of the Atlas Mountains. Small-scale breeding could occur if more rains fall as temperatures warm up during the forecast period.

Libyan Arab Jamahiriya

• SITUATION

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

• FORECAST

Low numbers of locusts are likely to be present and will persist in the southwest near Ghat. Small-scale breeding could occur if rains fall and temperatures remain warm.

Tunisia

• SITUATION

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

• FORECAST

No significant developments are likely.

CENTRAL REGION

Sudan

• SITUATION

During the first half of January, scattered mature solitarious adults at densities up to 150 adults/ha were seen in a few places on the Red Sea coast, mainly on the southern plains between Aiterba (1753N/3819E) and the Eritrean border and, to a lesser extent, in the Tokar Delta and on the northern coast near Oseif (2146N/3651E). No locusts were seen after mid-month in the above areas as well as in Wadi Diib near Sufiya (2119N/3613E).

• FORECAST

Small-scale breeding may occur early in the forecast period in the Tokar Delta and on the southern



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coast; otherwise, locust numbers will decline unless further rains fall.

Eritrea

• SITUATION

No locusts were seen during a survey carried out in the last week of January on the central Red Sea coast between Sheib (1551N/3903E) and Afabet (1612N/3841E).

• FORECAST

Small-scale breeding is expected to occur on the central Red Sea coast near Sheib and Sheshela, causing locust numbers to increase slightly but remain below threatening levels. Regular monitoring should continue during the forecast period.

Ethiopia

• SITUATION

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

• FORECAST

No significant developments are likely.

Djibouti

• SITUATION

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

• FORECAST

No significant developments are likely.

Somalia

• SITUATION

During January, no locusts were seen during surveys carried out on the plateau between Boroma (0956N/4313E) and Burao (0931N/4533E) and on the northwest coast between Silil (1058N/4326E) and Berbera (1028N/4502E).

• FORECAST

No significant developments are likely.

Egypt

• SITUATION

During January, isolated third and fourth instar solitary hoppers were present at one place on the Red Sea coast south of Halaib (2213N/3638E) near the Sudanese border. No locusts were seen during surveys elsewhere on the coast as far north as Marsa Alam (2504N/3454E) or near Lake Nasser.

• FORECAST

Unless further rains fall, breeding will come to an end on the Red Sea coast south of Shalatyn and locust numbers will decline.

Saudi Arabia

• SITUATION

No locusts were seen during surveys carried out in January on the Red Sea coast near Rabigh (2247N/3901E), in the Asir Mountains near Khamis Mushait (1819N/4245E) and in the interior near Buraydah (2621N/4358E).

• FORECAST

Unless further rains fall, locust numbers will remain low or absent.

Yemen

• SITUATION

During January, isolated immature and mature solitary adults were present at a few places on the Red Sea coast near Hodeidah (1450N/4258E). No locusts were seen elsewhere along the coast.

• FORECAST

Low numbers of locusts will persist along the Red Sea coastal plains. Similar populations may be present on the Gulf of Aden coastal plains near Aden and Zinjibar but locust numbers will remain low unless further rains fall.

Oman

• SITUATION

No locusts were seen during surveys carried out in January along the northern Batinah coast, in the interior of Dhahira, Dakhliya and Sharqiya, and in the southern region of Dhofar.

• FORECAST

Low numbers of adults could appear and breed on a small scale in areas of recent rainfall in the northern interior and coastal areas.

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 during surveys carried out on the southeast coast between Jask (2540N/5746E) and the Pakistani border, and in the western portion of the Jaz Murian Basin southeast of Kahnuj (2757N/5742E).

• **FORECAST**

Low numbers of adults could appear in the spring breeding areas along the southeast coast and breed on a small scale in areas of recent rainfall.

Pakistan

• **SITUATION**

No locusts were reported during the second fortnight of December and throughout January.

• **FORECAST**

Low numbers of adults could appear in the spring breeding areas along the coast of Baluchistan and breed on a small scale in areas of recent rainfall.

India

• **SITUATION**

No locusts were seen during intensive surveys carried out in January in the summer breeding areas in Rajasthan and Gujarat.

• **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.

Google group. FAO DLIS has established a Google group for national locust information officers to exchange opinions and share experiences regarding data management and analysis, GIS, eLocust2, eLocust2Mapper and satellite imagery. Interested information officers should contact DLIS (eclo@fao.org) for details.

MODIS imagery. Columbia University's International Research Institute for Climate and Society (IRI) provides 16-day 250-metre resolution MODIS imagery as well as daily and decadal rainfall imagery for monitoring breeding conditions in the Desert Locust recession area. These products can be downloaded in different formats suitable for GIS at: http://iridl.ldeo.columbia.edu/maproom/.Food_Security/.Locusts/index.html. The site is available in English and French. Address comments and questions to Pietro Ceccato (pceccato@iri.columbia.edu).

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

- **Desert Locust situation updates.** Archives Section – Briefs
- **Desert Locust risk map update.** Archives Section – Risk maps
- **Mauritania outbreak overview.** Information Section – home page
- **CLCPANO session reports.** Publications Section – Regional commission reports

Locust Watch in Caucasus and Central Asia. The Locust Group at FAO has launched a new website (www.fao.org/ag/locusts-CCA/en/index.html) that contains information in English and Russian on three locust pests in the Caucasus and Central Asia, the current situation, potential impact on food security, and national and regional level activities.

2010 events. The following activities are scheduled or planned:

- **EMPRES/WR Phase 2.** Planning meeting, Dakar (8-12 March)



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- **SWAC/CRC Locust Information Officers.** 3rd Inter-regional workshop on the use and improvement of RAMSES and eLocust2, Cairo (18-19 April)
- **SWAC/CRC Master Trainers.** 2nd Master Trainers training course, Iran (8-13 May)
- **CLCPRO.** 6th session of Executive Committee, Ouagadougou, Burkina Faso (28-30 June)
- **SWAC.** 27th session, venue to be determined (Dec)



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.

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.



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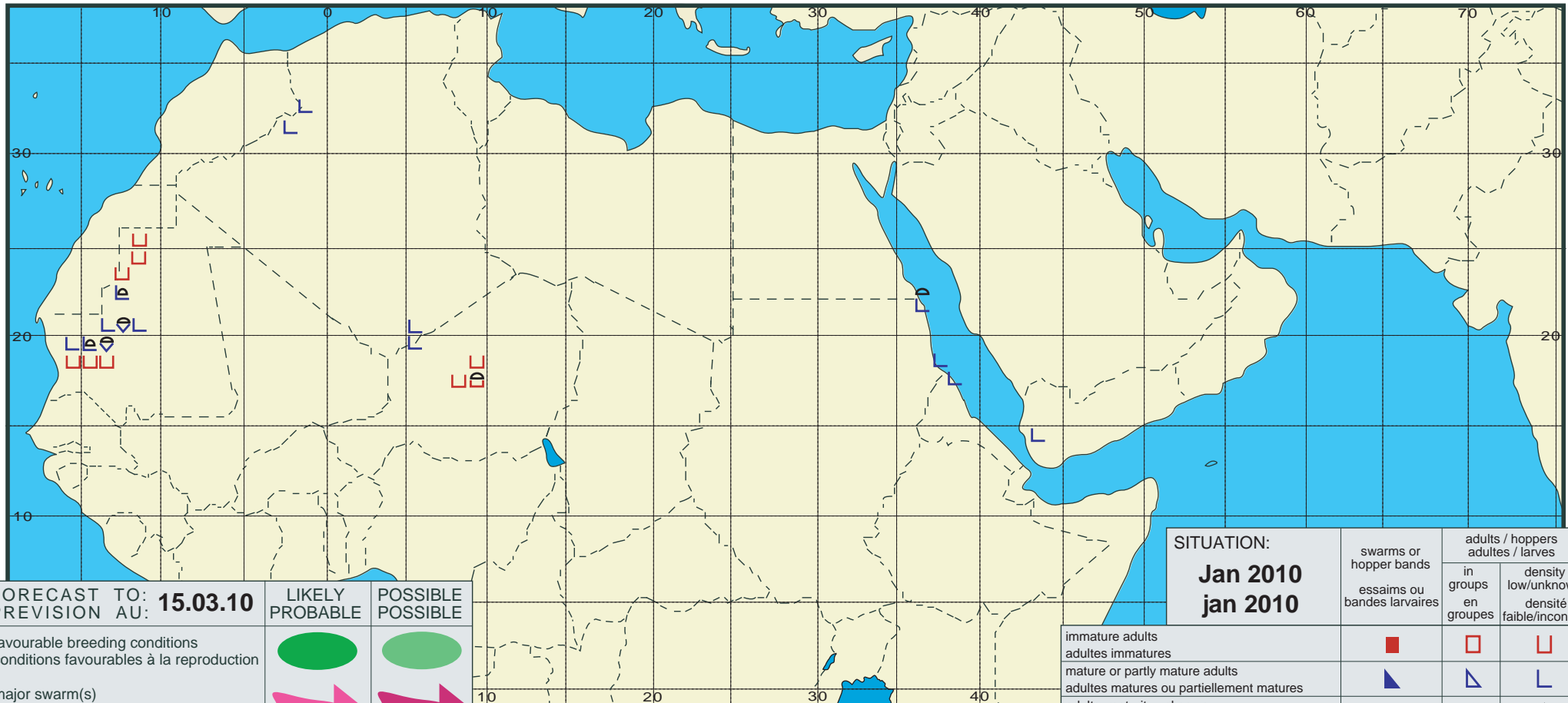
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Desert Locust Summary

Criquet pèlerin - Situation résumée

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FORECAST TO: PREVISION AU: 15.03.10	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: Jan 2010 jan 2010	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)			