



# Desert Locust Bulletin

## General situation during March 2018 Forecast until mid-May 2018

### WESTERN REGION: CALM

**SITUATION.** No locusts reported except for isolated adults in one place in central **Algeria**.

**FORECAST.** If rains fall, small-scale breeding may occur along the southern side of the Atlas Mountains in **Morocco** and in parts of the central Sahara in **Algeria**. No significant developments are likely.



### CENTRAL REGION: CALM

**SITUATION.** No locusts reported except for isolated adults in one place on the southern coast of **Yemen**.

**FORECAST.** Small-scale breeding may occur in areas of recent rain in the interior of **Saudi Arabia**. No significant developments are likely.

### The Desert Locust situation continued to remain calm during March

No significant rain fell during March in the winter breeding areas along both sides of the Red Sea for the fourth consecutive month. As a result, unusually dry and unfavourable breeding conditions prevailed and locust populations did not increase this year during the winter. Consequently, locust numbers are very low in all areas and this is expected to continue during the spring and summer unless good rains fall. No locusts were reported in March except for isolated solitarious adults at one location in the central Sahara of Algeria and in one area on the southern coast of Yemen. Light rains commenced in parts of the spring breeding areas in the interior of Saudi Arabia and along both sides of the Iran-Pakistan border. If more rains fall during the forecast period in these areas and along the southern side of the Atlas Mountains in Morocco and Algeria, then small-scale breeding could occur but locust populations will remain low and no significant developments are likely.

### EASTERN REGION: CALM

**SITUATION.** No locusts reported.

**FORECAST.** Small-scale breeding is likely to occur in areas of recent rain in southwest **Pakistan** and southeast **Iran**. No significant developments are likely.

The FAO Desert Locust Bulletin is issued every month by the Desert Locust Information Service (DLIS) at FAO HQ in Rome, Italy. DLIS continuously monitors the global Desert Locust situation, weather and ecology to provide early warning based on survey and control results from affected countries, combined with remote sensing, historical data and models. The bulletin is supplemented by Alerts and Updates during periods of increased Desert Locust activity. Products are distributed by e-mail and Internet.

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## Weather & Ecological Conditions in March 2018

Light showers fell in parts of the spring breeding areas in the interior of Saudi Arabia and in southwest Asia. Ecological conditions remained unfavourable in the winter breeding areas due to poor rains along both sides of the Red Sea.

### WESTERN REGION

Very little rain fell during March and dry conditions persisted in all areas except in parts of the Draa and Ziz-Ghris Valleys along the southern side of the Atlas Mountains in Morocco and near irrigated perimeters in the Adrar Valley of the central Sahara in Algeria. During the last week of the month, light showers fell northeast of the Air Mountains in northern Niger. Localized patches of green vegetation may be present in northern (near Bir Moghreïn and Tamreiket) and northwest (near Oujeft) Mauritania, in a few wadis of the Adrar des Iforas in northern Mali and in parts of the Air Mountains.

### CENTRAL REGION

Poor rains and dry conditions persisted during March throughout most of the winter breeding areas along both sides of the Red Sea except for light showers that may have fallen on the northern coast of the Red Sea in Yemen during the first decade. Consequently, ecological conditions continued to remain unfavourable for breeding. In northern Somalia, light rainfall may have occurred during the first decade on the plateau and escarpment north of Boroma that could have run off onto parts of the northwest coastal plains. In the spring breeding areas, light rains fell in the central interior of Saudi Arabia near Gassim and heavier rains fell in the Empty Quarter from Wadi Dawasir to western UAE. Traces of rain fell on the northern coast of Oman and parts of the interior.

### EASTERN REGION

Light to moderate rains fell during the first decade of March in coastal and interior spring breeding area of Baluchistan in western Pakistan between Jiwani and Khuzdar. Scattered showers fell in adjacent areas of southeast Iran. Nevertheless, dry and unfavourable breeding conditions prevailed in the region.



### Area Treated

No control operations were reported during March.



## Desert Locust Situation and Forecast

### WESTERN REGION

#### MAURITANIA

• SITUATION

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

• FORECAST

*No significant developments are likely.*

#### MALI

• SITUATION

No locust activity was reported during March.

• FORECAST

*Low numbers of adults may be present and could persist in parts of the Adrar des Iforas.*

#### NIGER

• SITUATION

No locust activity was reported during March.

• FORECAST

*Low numbers of adults are likely to be present and will persist in a few places in the Air Mountains.*

#### CHAD

• SITUATION

No locust activity was reported during March.

• FORECAST

*No significant developments are likely.*

#### SENEGAL

• SITUATION

No locust activity was reported during March.

• 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 March, isolated mature solitary adults were seen at one place near irrigated cropping areas in the Adrar Valley (2753N/0017W) of the central Sahara. No locusts were seen elsewhere in the valley or in the east near Illizi (2630N/0825E) and in the south near Tamanrasset (2250N/0528E).

• FORECAST

*Small-scale breeding may occur near irrigated cropping areas in the Adrar Valley and in runoff areas of the south and east if rains fall. No significant developments are likely.*

## MOROCCO

### • SITUATION

During March, no locusts were seen in the Draa Valley between Fom Zguid (3005N/0652W) and Fom El Hassan (2901N/0853W).

### • FORECAST

*Isolated adults may be present in some places along the Draa Valley where small-scale breeding could occur if rains fall.*

## LIBYA

### • SITUATION

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

### • FORECAST

*No significant developments are likely.*

## TUNISIA

### • SITUATION

No locust activity was reported during March.

### • FORECAST

*No significant developments are likely.*

## CENTRAL REGION

### SUDAN

#### • SITUATION

No locusts were seen on the Red Sea coast between Port Sudan (1938N/3713E) and the Eritrean border.

#### • FORECAST

*No significant developments are likely.*

### ERITREA

#### • SITUATION

No locusts were seen during a survey carried out on the Akbanazouf Plain (1555N/3910E) along the central Red Sea coastal northwest of Massawa (1537N/3928E) on 2 March.

#### • FORECAST

*No significant developments are likely.*

### ETHIOPIA

#### • SITUATION

No reports were received in March.

#### • FORECAST

*Isolated adults may be present along the railway area where small-scale breeding could occur if rains fall.*

### DJIBOUTI

#### • SITUATION

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

#### • FORECAST

*No significant developments are likely.*

## SOMALIA

### • SITUATION

No reports were received in March.

### • FORECAST

*Low numbers of adults may be present on the northwest coast or escarpment where they could breed on a small scale in areas of recent rainfall or runoff. No significant developments are likely.*

## EGYPT

### • SITUATION

During March, no locusts were seen on the Red Sea coast and subcoastal areas between Marsa Alam (2504N/3454E) and the Sudanese border, and in the interior near Lake Nasser between Abu Simbel (2219N/3138E) and Tushka (2247N/3126E).

### • FORECAST

*No significant developments are likely.*

## SAUDI ARABIA

### • SITUATION

During March, no locusts were seen in the winter breeding areas along the Red Sea coast north of Jeddah (2130N/3910E) and on the southern coast near Jizan (1656N/4233E), or in the spring breeding areas of the interior between Wadi Dawasir (2028N/4747E), Gassim (2621N/4358E), Hail (2731N/4141E) and Tabuk (2823N/3635E).

### • FORECAST

*Low numbers of adults may be present in the spring breeding areas of the interior between Wadi Dawasir and Tabuk where small-scale breeding could occur in any areas that receive rainfall.*

## YEMEN

### • SITUATION

Isolated immature solitary adults were seen at one place on the southern coast northeast of Aden (1250N/4503E) in late March. No surveys were carried out and no locusts were reported on the Red Sea coast.

### • FORECAST

*Low numbers of adults may be present in a few areas along the Red Sea coast where small-scale breeding could occur if additional rains fall.*

## OMAN

### • SITUATION

During March, no locusts were seen during surveys carried out on the Musandam Peninsula, along the Batinah coast, in the northern interior near Buraimi (2415N/5547E) and Adam (2223N/5731E), and in the southern interior to the north of Thumrait (1736N/5401E).

### • FORECAST

*Isolated adults may appear on the Batinah coast and in parts of the northern interior where small breeding*

could occur in areas that receive rainfall. No significant developments are likely.

**BAHRAIN, IRAQ, ISRAEL, JORDAN, KENYA, KUWAIT, LEBANON, PALESTINE, QATAR, SOUTH SUDAN, SYRIA, TANZANIA, TURKEY, UAE AND UGANDA**

• FORECAST

No significant developments are likely.

## EASTERN REGION

### IRAN

• SITUATION

No locusts were seen during a survey carried out on the southeast coast near Jask (2540N/5746E) on 22 March.

• FORECAST

Low numbers of solitary adults may appear on the southeast coast and in Jaz Murian, and breed on a small scale in areas of recent rainfall.

### PAKISTAN

• SITUATION

During March, no locusts were seen during surveys carried out in the Uthal (2548N/6637E) and Khuzdar (2749N/6639E) areas of Baluchistan.

• FORECAST

Small-scale breeding may occur in coastal and interior areas of Baluchistan that received rainfall in early March. No significant developments are likely.

### INDIA

• SITUATION

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

• FORECAST

No significant developments are likely.

### AFGHANISTAN

• SITUATION

No reports received.

• FORECAST

No significant developments are likely.



## Announcements

## 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 bulletins. 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

**Calm (green).** Countries should report at least once/month and send RAMSES data with a brief interpretation.

**Caution (yellow), threat (orange) and danger (red).**

During 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.

**Bulletins.** Affected countries are encouraged to prepare decadal and monthly bulletins summarizing the situation.

**Reporting.** All information should be sent by e-mail to the FAO/ECLD Desert Locust Information Service (eclod@fao.org). Reports received by the first two days of the new month will be included in the FAO Desert Locust Bulletin for the current month; otherwise, they will not appear until the following month. Reports should be sent even if no locusts were found or if no surveys were conducted.

## New information

Recent additions to the Locust Watch site ([www.fao.org/ag/locusts](http://www.fao.org/ag/locusts)) are:

- **WMO/FAO Weather and Desert Locusts booklet.**  
Publications – Documents

## Calendar

The following activities are scheduled or planned:

- **CLCPRO.** Regional Desert Locust Information Officer workshop, Algiers (1–5 July)
- **CRC/SWAC.** Interregional Desert Locust Information Officer workshop, Cairo (15–19 July, tbc)
- **CLCPRO.** Regional Workshop on Monitoring and Evaluation System, Agadir, Morocco (7–11 May)
- **CLCPRO.** Joint meeting of the 9<sup>th</sup> session and 13<sup>th</sup> Executive Committee, N'Djamena (18–22 June)
- **DLCC.** 41<sup>st</sup> session, Tunis, Tunisia (22–25 October)



## 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<sup>2</sup> • band: 1–25 m<sup>2</sup>

### Small

- swarm: 1–10 km<sup>2</sup> • band: 25–2,500 m<sup>2</sup>

### Medium

- swarm: 10–100 km<sup>2</sup> • band: 2,500 m<sup>2</sup> – 10 ha

### Large

- swarm: 100–500 km<sup>2</sup> • band: 10–50 ha

### Very large

- swarm: 500+ km<sup>2</sup> • band: 50+ ha

## Rainfall

### Light

- 1–20 mm

### Moderate

- 21–50 mm

### Heavy

- more than 50 mm

### Summer rains and breeding areas

- July–September/October
- Sahel of West Africa, Sudan, western Eritrea; Indo-Pakistan border

### Winter rains and breeding areas

- October–January/February
- Red Sea and Gulf of Aden coasts; northwest Mauritania, Western Sahara

### Spring rains and breeding areas

- February–June/July
- Northwest Africa, Arabian Peninsula interior, Somali plateau, Iran/Pakistan border

## Other reporting terms

### Breeding

- The process of reproduction from copulation to fledging

### Recession

- Period without widespread and heavy infestations by swarms

### Remission

- Period of deep recession marked by the complete absence of gregarious populations

### 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

## 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

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

### 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, Lebanon, Palestine, Qatar, South Sudan, Syria, Tanzania, Turkey, UAE and Uganda

### Eastern

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



## Useful tools and resources

**FAO Locust Watch.** Information, maps, activities, publications, archives, FAQs, links  
<http://www.fao.org/ag/locusts>

**FAO Desert Locust regional commissions.** Western Region (CLCPRO), Central Region (CRC), South-West Asia (SWAC)  
<http://www.fao.org/ag/locusts>

**IRI RFE.** Rainfall estimates every day, decade and month  
[http://iridl.ldeo.columbia.edu/maproom/.Food\\_Security/.Locusts/index.html](http://iridl.ldeo.columbia.edu/maproom/.Food_Security/.Locusts/index.html)

**IRI Greenness maps.** Dynamic maps of green vegetation evolution every decade  
[http://iridl.ldeo.columbia.edu/maproom/Food\\_Security/Locusts/Regional/greenness.html](http://iridl.ldeo.columbia.edu/maproom/Food_Security/Locusts/Regional/greenness.html)

**IRI MODIS.** Vegetation imagery every 16 days  
[http://iridl.ldeo.columbia.edu/maproom/Food\\_Security/Locusts/Regional/MODIS/index.html](http://iridl.ldeo.columbia.edu/maproom/Food_Security/Locusts/Regional/MODIS/index.html)

**Windy.** Real time rainfall, winds and temperatures for locust migration  
<http://www.windy.com>

**eLocust3 training videos.** A set of 15 introductory training videos are available on YouTube  
<https://www.youtube.com/playlist?list=PLf7Fc-oGpFHEDv1jAPaF02TCfpcnYoFQT>

**RAMSESv4 training videos.** A set of basic training videos are available on YouTube  
<https://www.youtube.com/playlist?list=PLf7Fc-oGpFHGyzXqE22j8-mPDhhGNq5So>

**RAMSESv4 and eLocust3.** Installer, updates, videos, inventory and support  
<https://sites.google.com/site/rv4elocust3updates/home>

**FAOLocust Twitter.** The very latest updates posted as tweets  
<http://www.twitter.com/faolocust>

**FAOLocust Facebook.** Information exchange using social media  
<http://www.facebook.com/faolocust>

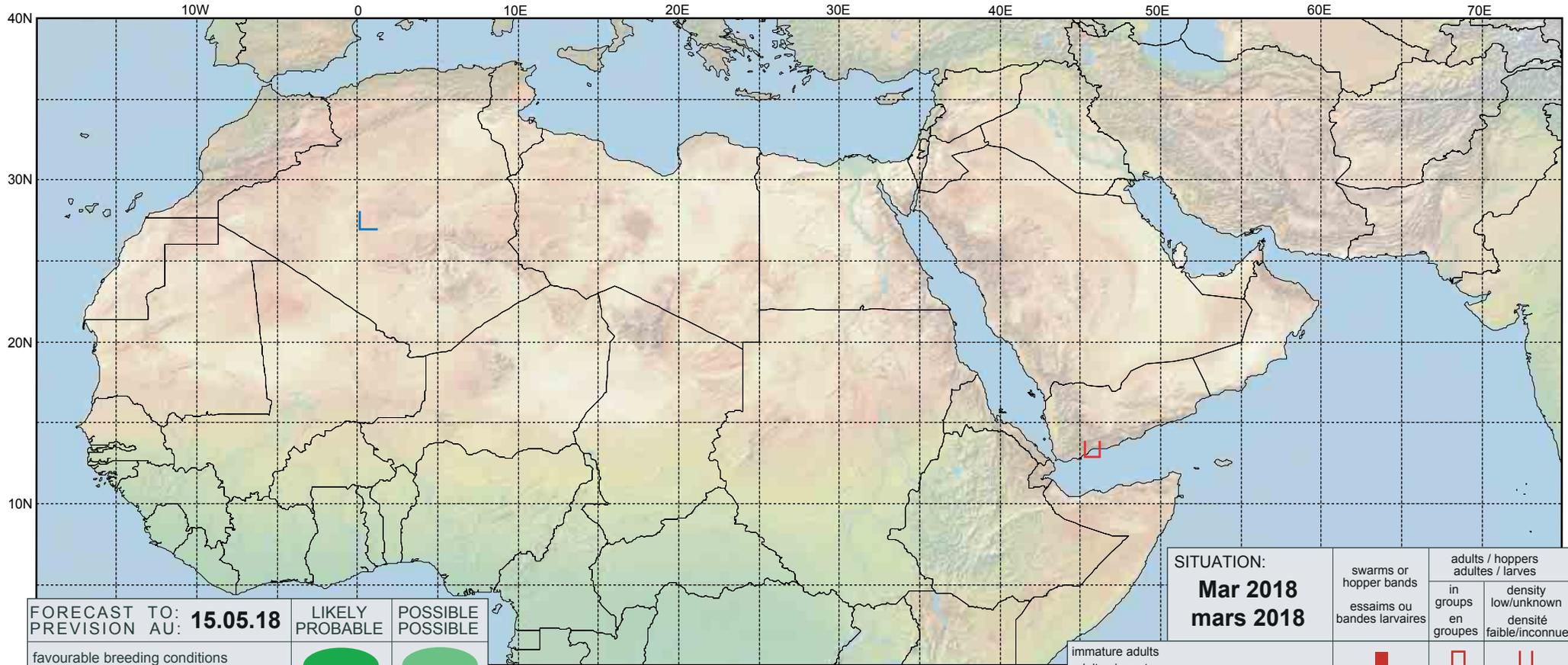
**FAOLocust Slideshare.** Locust presentations and photos  
<http://www.slideshare.net/faolocust>

**eLERT.** Online database of resources and technical specifications for locust emergencies  
<http://sites.google.com/site/elertsite>



# Desert Locust Summary

## Criquet pèlerin - Situation résumée



FORECAST TO:  
PREVISION AU: **15.05.18**

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:

**Mar 2018**  
**mars 2018**

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)

