

Food and Agriculture Organization of the United Nations



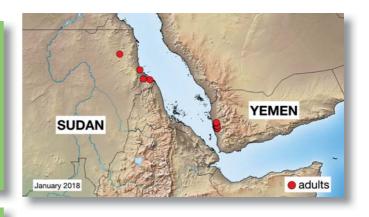
No. 472 2 FEBRUARY 2018

# **Desert Locust Bulletin**

General situation during January 2018 Forecast until mid-March 2018

# **WESTERN REGION: CALM**

**SITUATION.** No significant rain fell and ecological conditions were mainly dry. No locusts were reported. **FORECAST.** The situation is expected to remain calm. Isolated adults may appear by the end of the forecast period in parts of the spring breeding areas along the southern side of the Atlas Mountains in **Morocco**. No significant developments are likely.



# **CENTRAL REGION: CALM**

**SITUATION.** No significant rain fell and ecological conditions were mainly dry excepts in coastal areas of **Sudan** and **Yemen** where low numbers of solitarious adults were present in a few places.

**FORECAST.** The situation is likely to remain calm. Small-scale breeding may occur on the Red Sea coast of **Sudan** and **Yemen** and, if more rains fall, in **Saudi Arabia** and **Eritrea**. No significant developments are likely.

# **EASTERN REGION: CALM**

SITUATION. No locusts reported. FORECAST. Low numbers of solitarious adults may start to appear in spring breeding areas of southwest Pakistan and southeast Iran by mid-March and breed if rains fall. No significant developments are likely.

# The Desert Locust situation continued to remain calm during January

No significant rain fell for the second consecutive month in the winter breeding areas along both sides of the Red Sea during January. Consequently, ecological conditions remained unusually dry and unfavourable for breeding in most areas. Only localized breeding on a small scale is likely to occur in some coastal areas of Sudan and Yemen where low numbers of solitarious adults were present in January. Small-scale breeding could also take place on the coast of Eritrea, Saudi Arabia and northern Somalia if additional rains fall during February. Dry conditions prevailed elsewhere in the recession area and no locusts were reported. During the forecast period, locust numbers will remain low and no significant development are likely. By mid-March, isolated adults may start to appear in the spring breeding areas in Northwest Africa and Southwest Asia.

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<br/>control results from affected countries, combined with remote sensing, historical data and models. The bulletin is supplemented by<br/>Alerts and Updates during periods of increased Desert Locust activity. Products are distributed by e-mail and Internet.Telephone: +39 06 570 52420 (7 days/week, 24 hr)Internet: www.fao.org/ag/locustsFacsimile: +39 06 570 55271Facebook: www.facebook.com/faolocustE-mail: eclo@fao.orgTwitter: twitter.com/faolocust



# Weather & Ecological Conditions in January 2018

No significant rain fell during January. For the second consecutive month, ecological conditions continued to be dry and unfavourable for breeding except for some coastal areas on both sides of the Red Sea.

# WESTERN REGION

No significant rain fell during January. Light rain may have fallen during the second decade in parts of the Hoggar Mountains in southeast Algeria extending to the eastern side of the Air Mountains in northern Niger. Ecological conditions remained mostly dry in the region except in the Ziz-Ghris Valley along the southern side of the Atlas Mountains in Morocco and near irrigated areas in the Adrar Valley of the central Sahara in Algeria. Low temperatures prevailed in Northwest Africa and light snow was present in some places south of the Atlas Mountains. Dry conditions prevailed in the northern Sahel of West Africa. Small localized areas of green vegetation persisted in northern Mali and Niger.

# **CENTRAL REGION**

Very little rain fell during January in the winter breeding areas along both sides of the Red Sea. Light showers fell on the southern portion of the Red Sea coast in Sudan and Yemen during the first decade. Green vegetation prevailed in a few places on the central Red Sea coast of Sudan, Eritrea and Yemen while dry conditions persisted elsewhere in the winter breeding areas along both sides of the Red Sea and Gulf of Oman. Light rain fell in northern Oman during the first decade where vegetation was green in some places.

# **EASTERN REGION**

No significant rain fell in the region during January. Ecological conditions remained unfavourable for breeding in all areas although vegetation was starting to become green on the southeast coast of Iran near Jask.



No control operations were reported during January.



# Desert Locust Situation and Forecast

# **WESTERN REGION**

# Mauritania

#### SITUATION

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

### • FORECAST

Low numbers of adults are likely to be present in parts of southwest Adrar and Tiris-Zemmour where small-scale breeding could occur once temperatures warm up and if additional rains fall.

# Mali

#### SITUATION

During January, there were unconfirmed reports of isolated immature and mature solitarious adults from three places in the north near Ti-n-kar (1926N/0022W).

• 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 January.

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 January.
- FORECAST

No significant developments are likely.

# SENEGAL

SITUATION

No locust activity was reported 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

No locusts were seen in the Adrar Valley (2753N/0017W) of the central Sahara and near Tamanrasset (2250N/0528E) in the south during January.

### • FORECAST

Scattered adults may persist in the extreme south near the Mali and Niger borders while others could remain near irrigated cropping areas in the Adrar Valley.

### Могоссо

### SITUATION

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

### • FORECAST

Isolated adults may appear by the end of the forecast period along the southern side of the Atlas Mountains.

# Libya

#### • SITUATION

No reports were received in January.

#### • FORECAST

No significant developments are likely.

# TUNISIA

SITUATION

No locust activity was reported during January.

• FORECAST

No significant developments are likely.

# **CENTRAL REGION**

### SUDAN

### SITUATION

In early January, isolated immature and mature solitarious adults at densities up to 125 adults/ha continued to be present on the Red Sea coast in the Tokar Delta (1827N/3741E) while isolated mature adults persisted near Suakin (1906N/3719E) and Aqiq (1813/N3811E). Scattered mature solitarious adults were also seen in the northeast subcoastal area near Tomala (2002N/3551E) in Wadi Oko/ Diib at mid-month.

### • FORECAST

Small-scale breeding will occur on a limited basis along the Red Sea coast between Port Sudan and Karora as well as in subcoastal areas of the northeast in Wadi Oko/ Diib, causing locust numbers to increase slightly but remain below threatening levels. Breeding is expected to finish by mid-March.

# Eritrea

# • SITUATION

No locusts were seen during surveys carried out on the central Red Sea coastal plains between Massawa (1537N/3928E) and Sheib (1551N/3903E) in mid-January. • FORECAST

Small-scale breeding may occur in areas on the Red Sea coastal plains that receive rainfall.

# Ετηιορία

#### SITUATION

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

### • FORECAST

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

# **D**ЈІВОUTI

### SITUATION

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

• FORECAST

No significant developments are likely.

# SOMALIA

SITUATION

No reports were received in January.

### • FORECAST

Low numbers of adults may be present on the northwest coast and could breed on a small scale in any areas that receive rainfall. No significant developments are likely.

# Egypt

### SITUATION

During January, 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

Isolated adults may be present on the southeastern coastal plains of the Red Sea where small-scale breeding may occur if rains fall.

# SAUDI ARABIA

### SITUATION

No locusts were seen during surveys carried out along the Red Sea coastal plains near Mecca (2125N/3949E), and between Qunfidah (1909N/4107E) and the Yemeni border on 9–17 January.

### • FORECAST

Low numbers of adults are likely to be present in winter breeding areas on the Red Sea coast and breed on a small scale in any areas that receive rainfall.

# YEMEN

### • SITUATION

Scattered immature and mature solitarious adults were present on the central Red Sea coastal plains between Bajil (1458N/4314E) and Zabid (1410N/4318E) in early January. • FORECAST

Small-scale breeding may take place on a limited basis in parts of the Red Sea and Gulf of Aden coastal plains where rainfall occurs.

# Oman

### SITUATION

No locusts were seen during surveys carried out in a few places of the Musandam Peninsula, the Batinah coast, the northern interior, and in the south near Thumrait (1736N/5401E) in January.

• FORECAST 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

During January, no locusts were seen during surveys carried out on the southeast coast near Jask (2540N/5746E).

### • FORECAST

Low numbers of solitarious adults may start to appear on the southeast coast by the end of the forecast period and breed if rains fall.

# PAKISTAN

### SITUATION

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

### • FORECAST

Low numbers of solitarious adults may start to appear in coastal areas of Baluchistan by the end of the forecast period and breed if rains fall.

# INDIA

### SITUATION

No locusts were seen during survey 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

# 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/ECLO Desert Locust Information Service (eclo@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) 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 (9–12 April)
- CRC/SWAC. Interregional Desert Locust Information Officer workshop, Cairo (5–8 May)
- 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. 41st session, Tunisia (October) tbc



# **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

<ul> <li>swarm: less than 1 km<sup>2</sup></li> </ul>	• band: 1–25 m <sup>2</sup>
Small	
<ul> <li>swarm: 1–10 km<sup>2</sup></li> </ul>	• band: 25–2,500 m <sup>2</sup>
Medium	
<ul> <li>swarm: 10–100 km<sup>2</sup></li> </ul>	• band: 2,500 m <sup>2</sup> – 10 ha
Large	
<ul> <li>swarm: 100–500 km<sup>2</sup></li> </ul>	• band: 10–50 ha
Very large	
<ul> <li>swarm: 500+ km<sup>2</sup></li> </ul>	• 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.



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

**IRI Greenness maps.** Dynamic maps of green vegetation evolution every decade 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

**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





