

No. 473 2 MARCH 2018

Desert Locust Bulletin

General situation during February 2018 Forecast until mid-April 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 during 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 drying out in coastal areas of **Sudan** and **Saudi Arabia**. Isolated solitarious adults were present in a few places of Tokar Delta in Sudan.

FORECAST. The situation is likely to remain calm. Low numbers of adults may appear in the interior of Saudi Arabia and breed on a small scale if rainfall occurs. Scattered adults are likely to be present on the Red Sea coastal plains in Yemen where small-scale breeding could occur. No significant developments are likely.

EASTERN REGION: CALM

SITUATION. No locusts reported.

FORECAST. Low numbers of solitarious adults may appear in the spring breeding areas of southwest **Pakistan** and southeast **Iran** and breed on a small scale if rains fall. No significant developments are likely.



The Desert Locust situation continued to remain calm during February

No significant rain fell for the third consecutive month in the winter breeding areas along both sides of the Red Sea during February. Consequently, unusually dry and unfavourable breeding conditions persisted in most areas. No locusts were reported except for scattered solitarious adults at two places on the Red Sea coast of Sudan. The poor rainfall this year has kept locust numbers very low in the traditional winter breeding areas at the time of year when locusts generally increase in number. Low temperatures and poor rainfall so far in the spring breeding areas suggest that breeding is likely to be limited and on a very small scale this year in Northwest Africa, the interior of Saudi Arabia and in southeast Iran and southwest Pakistan during the spring. Unless unusually heavy rainfall occurs followed by substantial breeding, it can be anticipated that only very low numbers of locusts will be present at the beginning of the summer in the Sahel of West Africa and Sudan, and along the Indo-Pakistan border.

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.

Telephone: +39 06 570 52420 (7 days/week, 24 hr)

Facsimile: +39 06 570 55271 E-mail: eclo@fao.org Internet: www.fao.org/ag/locusts
Facebook: www.facebook.com/faolocust

Twitter: twitter.com/faolocust

Weather & Ecological Conditions in February 2018

No significant rain fell during February for the third consecutive month and vegetation started to dry out in winter breeding areas along both sides of the Red Sea.

WESTERN REGION

Very little rain fell during February. Showers may have fallen in parts of northern Mauritania (Nouadhibou, Inchiri, southwest Adrar and northeast Tiris-Zemmour) and in adjacent areas of southwestern Western Sahara. Light to moderate rain fell in northwest Libya. Dry and unfavourable breeding conditions persisted throughout the region except near irrigated parameters in the Adrar Valley of the central Sahara in Algeria, in parts of the Draa and Ziz-Ghris Valleys along the southern side of the Atlas Mountains in Morocco and in parts of central Western Sahara between Guelta Zemmur and W. Sakia El Hamra. Low temperatures prevailed throughout most of Northwest Africa.

CENTRAL REGION

No significant rain fell during February in the winter breeding areas along both sides of the Red Sea. Consequently, vegetation was dry or drying out in most places except for a few spots along the northern and southern coastal plains in Saudi Arabia, and on the central coast of Sudan. In general, very little rain fell this year in the winter breeding areas with the last significant rainfall occurring in November on the coast of Saudi Arabia. This has contributed to poor breeding conditions and hence only low and insignificant numbers of solitarious locusts present during this winter. In the spring breeding areas, light rain may have fallen in the interior of Saudi Arabia between Gassim and Hail during the last week of the month. Elsewhere, light rains fell at times in parts of northern Oman where temperatures were unusually warm, causing mostly vegetation to remain dry.

EASTERN REGION

Very little rain fell in the region during February except for some showers at mid-month in the Jaz Murian Basin in the interior of southeastern Iran, and vegetation continued to become green in adjacent areas along the southeastern coastal plains. Dry and unfavourable breeding conditions prevailed elsewhere in the region.



No control operations were reported during February.



WESTERN REGION

MAURITANIA

SITUATION

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

FORECAST

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

Mali

• SITUATION

No locust activity was reported during February.

• 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 February.

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 February.

• FORECAST

No significant developments are likely.

SENEGAL

• SITUATION

No locust activity was reported during February.

• 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 west of Tamanrasset (2250N/0528E) in the south during February.

• FORECAST

As temperatures warm up, low numbers of adults may appear near irrigated cropping areas in the Adrar Valley and start to breed on a small scale. No significant developments are likely.

No. 473 February 2018 page 2 of 7

Могоссо

• SITUATION

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

FORECAST

Isolated adults may appear along the southern side of the Atlas Mountains and breed on a small scale if rains fall.

LIBYA

SITUATION

No locust activity was reported during January and February.

• FORECAST

No significant developments are likely.

TUNISIA

SITUATION

No locust activity was reported during February.

• FORECAST

No significant developments are likely.

CENTRAL REGION

SUDAN

SITUATION

During February, no locusts were seen on the Red Sea coast from north of Port Sudan (1938N/3713E) to the Eritrean border except for a few scattered mature solitarious adults at two places in the Tokar Delta (1827N/3741E).

• 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 surveys were carried out and no locusts were reported in February.

• FORECAST

Isolated adults may be present in a few places on the central and northern Red Sea coastal plains but, unless further rains fall, breeding is not expected and no significant developments are likely.

Етніоріа

• SITUATION

No reports were received in February.

• FORECAST

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

DJIВОUТІ

• SITUATION

No reports were received in February.

• FORECAST

No significant developments are likely.

SOMALIA

• SITUATION

No reports were received in February.

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 February, 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 February, no locusts were seen during surveys carried out along the Red Sea coastal plains from the north near Al Wajh (2615N/3627E) to the south near the Yemeni border.

• FORECAST

Low numbers of adults may appear in the spring breeding areas of the interior between Gassim and Tabuk where small-scale breeding may occur once temperatures increase in any areas that receive rainfall.

YEMEN

• SITUATION

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

• 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 on the Musandam Peninsula, the Batinah coast and in the northern interior during February.

• 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

During February, no locusts were seen during surveys carried out on the southeast coast near Jask (2540N/5746E) and Chabahar (2517N/6036E).

• FORECAST

Low numbers of solitarious adults may appear on the southeast coast and in Jaz Murian, and breed on a small scale if rains fall.

PAKISTAN

SITUATION

No locusts were seen during surveys carried out in the Uthal (2548N/6637E) in the last week of February.

• FORECAST

Low numbers of solitarious adults may initially appear in coastal areas of Baluchistan, followed by interior areas. Small-scale breeding could occur in both areas if rains fall.

INDIA

• SITUATION

No locusts were seen during survey carried out in Rajasthan and Gujarat in February.

• FORECAST

No significant developments are likely.

AFGHANISTAN

• SITUATION

No reports received.

• FORECAST

No significant developments are likely.



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 (6–10 May)
- CLCPRO. Regional Workshop on Monitoring and Evaluation System, Agadir, Morocco (7–11 May)
- CLCPRO. Joint meeting of the 9th session and 13th 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)

No. 473 February 2018 page 4 of 7

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

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
- 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

Plaque

 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.

No. 473 February 2018 page 5 of 7

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

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

No. 473 February 2018 page 6 of 7

