

Desert Locust Bulletin

General situation during April 2020
Forecast until mid-June 2020

WESTERN REGION: CALM

SITUATION. Isolated locusts in **Algeria, Morocco,** and northern **Mali**.

FORECAST. Very limited breeding possible in **Morocco** and **Algeria**. Low risk of swarms appearing in the eastern Sahel and moving westwards in June.

CENTRAL REGION: THREAT

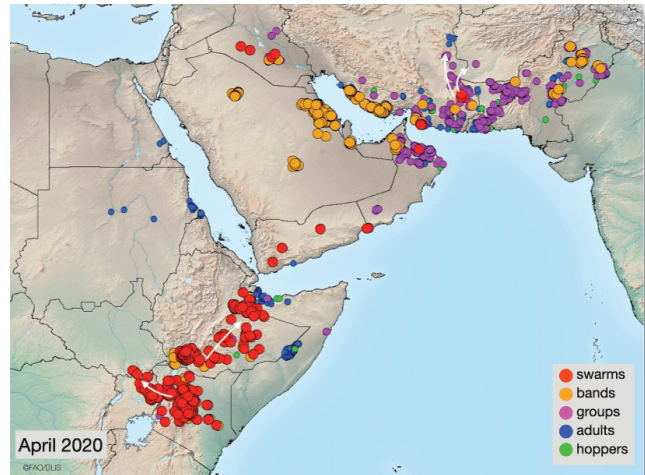
SITUATION. Control operations against hopper bands and new-generation swarms in **Kenya** (14 637 ha treated) and **Ethiopia** (99 948 ha); a few swarms in **South Sudan, Uganda, Djibouti**; hopper groups in northern and central **Somalia** (600 ha). Hopper bands in northeast Saudi Arabia (29 868 ha) and **UAE** (1 320 ha); swarms and bands in **Iraq** (815 ha); hopper and adult groups with breeding in **Oman** (4 147 ha); swarm breeding in **Yemen** interior; a few swarms on Yemen/Oman border; scattered adults in **Sudan** and **Egypt**.

FORECAST. Second-generation hatching and band formation in **Kenya, Ethiopia,** and **Somalia** with new swarms in mid-June. A few swarms may invade **South Sudan** and **Uganda** and move north. Immature adult groups and swarms to form in **Saudi Arabia** and **Oman** and move to summer breeding areas. Bands and swarms to form in **Yemen**. Swarms from East Africa may arrive in **Eritrea** and **Sudan** from mid-June onwards.

EASTERN REGION: THREAT

SITUATION. Hopper bands in southwest **Iran** and adult group laying in southeast (98 658 ha treated). Hopper and adult groups in Baluchistan, hopper bands in Indus Valley and Punjab, **Pakistan** (50 289 ha treated). Adult groups laying in southwest **Afghanistan** (20 ha).

FORECAST. More band and swarm formation in southern **Iran** and southwest **Pakistan**. A few swarms likely to reach Indo-Pakistan border area in early May followed by several waves of swarms later in May and June.



Locusts will increase further and extend to other areas

The current situation and forecast are alarming as locust infestations are expected to extend to other areas in the Horn of Africa and southwest Asia. Widespread rains fell in East Africa for the second consecutive month in April. Although control operations have reduced locust populations, another generation of breeding will cause locust numbers to increase further as new hopper bands and swarms form in Kenya, Ethiopia and Somalia during May and June. Swarms are expected to move further north in Ethiopia and Somalia with a risk that a few swarms may reach Eritrea and Sudan in mid-June. The situation is very worrisome in Yemen because several swarms laid eggs in the interior where widespread, heavy rains fell, which will allow hatching and hopper bands and swarms to form. Breeding in the Arabian Peninsula caused hopper bands to form in parts of Saudi Arabia, Iraq and UAE, and hopper and adult groups in northern Oman. Any swarms that form can move to the summer breeding areas in Yemen, Sudan and along the Indo-Pakistan border. Some swarms could perhaps continue to Chad and Niger. In southwest Asia, more hopper groups and bands formed in Iran and to a lesser extent in Pakistan. Adult groups and small swarms from breeding in Baluchistan, the Indus Valley, and Punjab in Pakistan are likely to move to desert areas along both sides of the Indo-Pakistan border from early May onwards. This is expected to be supplemented by several waves of swarms coming from the spring breeding areas during June.

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.

Telephone: +39 06 570 52420 (7 days/week, 24 hr)
E-mail: eclou@fao.org / faodlislocust@gmail.com

Internet: www.fao.org/ag/locusts
Facebook/Twitter: faolocust



Weather & Ecological Conditions in April 2020

Widespread and heavy rains fell in the Horn of Africa, the interior of Yemen, and southern Iran that will allow breeding to continue.

WESTERN REGION

No significant rain fell in the region during April. Consequently, breeding conditions were favourable on a limited basis in a few areas of Algeria mainly near irrigated agricultural perimeters in the Adrar Valley in central Sahara and in runoff areas of the Hoggar Mountains in the south near Tamanrasset. Similar conditions were present in Morocco along parts of the Draa Valley south of the Atlas Mountains.

CENTRAL REGION

During April, light to moderate rains fell at times in northeast Saudi Arabia, extending to central and southern interior areas, and to Qatar and UAE. In Yemen, heavy rains fell throughout the interior on 14–24 April, causing floods in Marib, Bayhan, Shabwah, Wadi Hadhramaut and Al Maharah. Heavy rains fell throughout most of Djibouti on the 20–21st when 80 mm fell in the capital, nearly half its annual average, 100 mm near Arta, and 60 mm in the south near Ali Sabieh, causing flooding. In East Africa, heavy rains fell in southern Ethiopia and near Dire Dawa during the first decade. Widespread rains fell during the second decade in Kenya, Ethiopia as far north as Amhara, southern Somalia, and in northwest Somalia. During the third decade, the rains intensified and spread further in all areas of Somalia and throughout Ethiopia as far north as Dire Dawa. Consequently, breeding conditions remained favourable and will continue for the next few months.

EASTERN REGION

Good rains fell in the spring breeding areas of southwest Iran near Bushehr and in the Jaz Murian Basin of the southeast interior during the first decade. This was followed by good rains on the central coast in southern Iran during the second decade and light showers in the third decade in the southwest and Jaz Murian. Good rains also fell in the Zabol area of northern Sistan-Baluchistan in Iran and adjacent areas in southwest Afghanistan. Very little rain fell elsewhere in Sistan-Baluchistan and in Baluchistan, Pakistan during April. Nevertheless, breeding conditions remained favourable from earlier rains in Iran but was declining in southwest Pakistan as vegetation started to dry out. Good rains fell in Punjab, Pakistan.



Area Treated

Control operations treated more than 302 000 ha in April compared to 182 000 ha in March.

| | |
|--------------|----------------------------|
| Afghanistan | 20 ha |
| Ethiopia | 51 633 ha (March, revised) |
| | 99 948 ha |
| India | 1 970 ha |
| Iran | 98 658 ha |
| Iraq | 815 ha |
| Kenya | 38 378 ha (March, revised) |
| | 14 637 ha |
| Oman | 4 147 ha |
| Pakistan | 50 289 ha |
| Saudi Arabia | 29 868 ha |
| Somalia | 600 ha |
| UAE | 1 320 ha |
| Uganda | (not reported) |



Desert Locust Situation and Forecast

WESTERN REGION

MAURITANIA

• SITUATION

No reports were received during April.

• FORECAST

No significant developments are likely.

MALI

• SITUATION

During April, immature and mature solitary adults were reportedly present in the northeast and concentrating in Timetrine southeast of Ti-n-kar (1926N/0022W) and along the western side of the Adrar des Iforas near Aguelhoc (1927N/0052E).

• FORECAST

Small concentrations of adults are likely to persist in a few places of the Adrar des Iforas, Tilemsi Valley and Timetrine.

NIGER

• SITUATION

No locusts were reported during April.

• FORECAST

There is a low risk that a few spring-bred swarms from Arabia could arrive in the east in mid-June and continue westwards.

CHAD

• SITUATION

No locusts were reported during April.

• FORECAST

There is a low risk that a few spring-bred swarms from Arabia could arrive in the east in early June and continue westwards.

BURKINA FASO

• SITUATION

No reports were received during April.

• FORECAST

No significant developments are likely.

SENEGAL

• SITUATION

No reports were received during April.

• FORECAST

No significant developments are likely.

BENIN, 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 April, isolated mature solitary adults were present in the central Sahara near Adrar (2753N/0017W) and in the southern Sahara to the north of Tamanrasset (2250N/0528E). No locusts were seen in the east near Illizi (2630N/0825E) and Djanet (2434N/0930E).

• FORECAST

Low numbers of locusts are likely to persist and may breed on a small scale in the Adrar Valley of the central Sahara during May.

MOROCCO

• SITUATION

During April, isolated mature solitary adults were present in a few places in the Draa Valley south of Fom Zguid (3005N/0652W) and Zagora (3019N/0550W).

• FORECAST

Small-scale breeding may occur in May along parts of the Draa Valley but locust numbers will remain low.

LIBYA

• SITUATION

During April, no locusts were seen in the southwest near Ghat (2459N/1011E).

• FORECAST

No significant developments are likely.

TUNISIA

• SITUATION

No locusts were reported during April.

• FORECAST

No significant developments are likely.

CENTRAL REGION

SUDAN

• SITUATION

During April, a few scattered mature solitary adults remained on the Red Sea coastal plains south of Suakin (1906N/3719E), in the Tokar Delta Tokar (1827N/3741E), and on the southern coast between Aiterba (1753N/3819E) and the Eritrean border. In the Nile Valley, scattered mature solitary adults were present near Ed Debba (1803N/3057E) and Karima (1832N/3148E), and along the Atbara River near Ed Damer (1734N/3358E).

• FORECAST

Small-scale breeding could occur in the Nile Valley. A few swarms from the Arabian Peninsula may arrive in summer breeding areas after mid-May and from East Africa at the end of the forecast period.

ERITREA

• SITUATION

No surveys were undertaken and no locusts were reported during April.

• FORECAST

A few swarms from adjacent areas of northern Ethiopia may arrive in the south and in the western lowlands at the end of the forecast period.

ETHIOPIA

• SITUATION

During April, hopper bands continued to mature and immature swarms formed in the south, mainly in southern parts of SNNPR (South Omo, Konso districts) region between Arba Minch (0602N/3733E) and Teltele (0504N/3723E), and to a limited extent in southern Oromiya (Borena) region. Breeding also occurred in southern Ogaden between Negele (0520N/3935E) to El Kere (0550N/4205E). Some of the swarms moved north in Oromiya to Bale district and in the Ogaden (Fike, Afder) where they matured. Other immature and mature swarms were present in the Somali region from the edge of the Rift Valley west of Dire Dawa (0935N/4150E) to Jijiga (0922N/4250E), Ayasha (1045N/4234E), and the Somali border. Egg-laying occurred until mid-month and hatching started in the second week, giving rise to first to third instar hopper bands. Control operations treated 99 948 ha of which 83 675 ha were by air.

• FORECAST

As more swarms mature in the south, another generation of breeding will occur in SNNPR and is expected to extend over a widespread portion of Oromiya, including the

Ogaden, where hatching and hopper band formation will occur during May with new swarms forming from mid-June onwards. In the Somali region, immature swarms will start to form in mid-May and mature although some swarms could move northwest to Afar and Amhara and east to northern Somalia.

DJIBOUTI

• SITUATION

On 5 April, a maturing swarm was seen flying in the southwest near As Eylā (1100N/4206E).

• FORECAST

A few mature groups and small swarms may appear between As Eylā and Obock, and breed in areas of recent flooding.

SOMALIA

• SITUATION

During April, scattered immature and mature solitarious adults were present on the northwest coast where copulating was seen near Bulhar (1023N/4425E), including a few groups. On the plateau, dense early instar hopper groups were seen in Xariirat district near the Ethiopian border west of Boroma (0956N/4313E). A mature swarm from adjacent areas of Ethiopia was seen nearby on the 20th. Ground teams treated 600 ha with biopesticides. Adults were laying northeast of Burao (0931N/4533E). In central areas, breeding occurred in northeastern Galkayo region where hoppers and groups were present northeast of Xamur (0713N/4851E). Scattered mature solitarious adults and a few hoppers were present in Galguduud region near Dusa Mareb (0532N/4623E). The situation in the south remains unclear.

• FORECAST

Locust numbers will continue to increase in the northwest from breeding on the coast and plateau where hopper bands will form, giving rise to adult groups and small swarms in June. A similar situation is likely to occur in areas of recent rains in the northeast, centre and south.

KENYA

• SITUATION

During April, hopper bands continued to mature and formed an increasing number of immature swarms that matured in northern and central counties, primarily Isiolo, Marsabit, Samburu, and Turkana, and to a lesser extent in Laikipia, Meru, Tharaka and Garissa. By the last week of April, the hopper bands had finished fledging. Second-generation hatching probably started about mid-month and by the end of the month, there were a few reports of first instar bands in Marsabit, Samburu and Isiolo. Ground and aerial control operations treated 14 637 ha of which 13 460 ha were by air.

• FORECAST

Locust numbers will concentrate and breed mainly in Turkana, Marsabit, Samburu and, to a lesser extent, in Isiolo and Mandera where laying, hatching and band formation will occur in May, giving rise to a new generation of immature swarms from mid-June onwards.

UGANDA

• SITUATION

During April, immature and mature swarms were reported at times in the northeast between Mbale (0105N/3411E), Moroto (0231N/3439E), and Kitgum (0318N/3253E) until the 16th. Control operations were carried out but not reported.

• FORECAST

Limited egg-laying may have occurred in a few places of the northeast, which would give rise to hopper bands during the forecast period. A few swarms are likely to arrive from western Kenya in the northeast and continue northwards.

SOUTH SUDAN

• SITUATION

On 8–12 April, several immature and mature swarms from northeast Uganda arrived in the southeast near Loboni Payam (0350N/3244E) and continued north to Magwi (0408N/3218E) in Eastern Equatoria.

• FORECAST

A few swarms could arrive in Eastern Equatoria and continue northwards.

EGYPT

• SITUATION

During April, isolated immature solitarious adults persisted in a few places on the Red Sea coast in the southeast near El Sheikh El Shazly (2412N/3438E). No locusts were seen elsewhere on the coast.

• FORECAST

No significant developments are likely.

SAUDI ARABIA

• SITUATION

During April, breeding intensified near the Persian Gulf north between Al Hofuf (2523N/4935E) and Qaryat Al Ulya (2733N/4742E) where more hopper bands formed as well as further south on the coast near the UAE border. By the 20th, many hoppers had reached fifth instar. Early instar hopper bands formed in the interior south of Riyadh in the Al Aflaj area near Layla (2218N/4643E) and in the Nafud Desert in the north between Hail (2731N/4141E) and Al Jawf (2948N/3952E). Ground teams treated 29 868 ha.

• FORECAST

Immature adult groups and small swarms are likely to form during May along the Persian Gulf, near Al Aflaj, and in the Nafud Desert, and move towards the east, south and southwest.

YEMEN

• SITUATION

During April, an immature swarm was seen on the 3rd on the coast at the Oman border. Another immature swarm was seen flying northwards in the southern highlands over Ad Dali (1341N/4443E) on the 4th. Groups of mature adults were copulating along the southern coast near Ahwar (1333N/4644E) and west of Aden (1250N/4503E) as well as in the interior near Bayhan (1452N/4545E) and on the eastern plateau north of Wadi Hadhramaut where several mature swarms were also seen. At the end of the month, a swarm was seen copulating in the interior south of Marib (1527N/4519E).

• FORECAST

Breeding will continue on the southern coast and in the interior where rains fell last month, causing locust numbers to increase and form hopper groups and bands that will lead to adult groups and swarms from mid-June onwards. A few swarms from the north or northeast may arrive in the interior from mid-May onwards. Cross-border swarm movements may occur along the Omani border. Breeding may also occur on the Red Sea coast.

OMAN

• SITUATION

During April, most of the hopper groups had fledged by mid-month on the northern coast from south of Muscat (2337N/5833E) to north of Jamma (2333N/5733E) and in the northern interior between Ibri (2314N/5630E) and Buraimi (2415N/5547E) and near Adam (2223N/5731E), and formed immature adult groups. An immature swarm was seen near Jamma on the 16th. Some of the adult groups in the interior had become mature, and adult groups were copulating south of Buraimi near the UAE border and also south of Sur (2234N/5930E). Ground teams treated 4 147 ha. In the south, immature groups were seen on the 1st north of Thumrait (1736N/5401E) and again at mid-month. There were cross-border movements of immature swarms on the coast at the Yemen border near Sarfayt (1641N/5307E) on the 3rd and the 21st.

• FORECAST

Although second-generation adult groups and perhaps a few small swarms are likely to form in the northern interior while hatching and hopper groups will continue in parts of Buraimi, Dhahira and Sharqiya, locusts will decline as conditions become dry. Swarms may appear in the south from adjacent areas of Yemen.

UAE

• SITUATION

During April, hopper bands, at densities of up to 250 hoppers/m², were seen along the Omani border south of Al Ain (2412N/5538E) and in the west near the Saudi Arabian border at Ras Ghumais (2421N/5136E) from egg-laying that started in late February and hatching from the second week

of March to after mid-April. Gregarious adults were also reported in a few places. Ground teams treated 1 320 ha.

• FORECAST

Small swarms may form near Al Ain and Ras Ghumais. A few other swarms may appear during periods of westerly winds.

IRAQ

• SITUATION

During the first week of April, a few medium-density mature swarms were seen copulating south of Karbala (3236N/4401E) between Al Diwaniyah (3158N/4453E) and Samawah (3117N/4516E). Hatching occurred during the first three weeks, giving rise to hopper groups and bands to form. A few mature swarms were seen west of Karbala. Ground teams treated 815 ha.

• FORECAST

Immature adult groups and perhaps a few small swarms are likely to form from mid-May onwards in the southern governorates of Al Najaf, Al Diwaniyah, Al Anbar and Al Muthanna. These may be supplemented by other immature swarms appearing from the south during periods of southerly winds.

KUWAIT, BAHRAIN, QATAR

• FORECAST

A few groups or small swarms may appear during periods of north-westerly or southerly winds.

JORDAN

• FORECAST

A few immature swarms may appear in the south and east in May during periods of easterly or southerly winds.

D.R. CONGO, ISRAEL, LEBANON, PALESTINE, SYRIA, TANZANIA AND TURKEY

• FORECAST

No significant developments are likely.

EASTERN REGION

IRAN

• SITUATION

During April, hatching occurred throughout the month along the southwest coast and subcoastal areas between Bushehr (2854N/5050E) and Bander-e Lengheh (2634N/5452E) where more hopper groups and bands formed with some reaching fifth instar in the last week. In the southeast, hopper and adult groups matured, and mature groups laid on the coast near Jask (2540N/5746E), subcoastal areas of Chabahar (2517N/6036E), and in the interior in the Suran (2717N/6159E) Valley and in the Jaz Murian Basin between Ghale Ganj (2731N/5752E) and Iranshahr (2712N/6042E). Adult groups moved north in northern Sistan-Baluchistan appearing near Zahedan (2930N/6051E) at mid-month and in South Khorasan near Nehbandan (3132N/6002E)

during the last week. Egg-laying was seen in these areas and along the Pakistani border south of Mirjaveh (2901N/6127E). At the end of April, new hatching and band formation occurred near Jask. Ground teams treated 98 658 ha.

• FORECAST

In the southwest, more adult groups and small swarms will form and mature. In the southeast, locust numbers will increase as more hatching occurs in coastal and interior areas, causing hopper groups and bands to form, giving rise to immature adult groups and swarms from late May onwards. In northern Sistan-Baluchistan and South Khorasan, hatching and band formation will occur in early May, giving rise to immature adult groups and small swarms in June. A few spring-bred swarms from the Arabian Peninsula may move east along the southern coast.

PAKISTAN

• SITUATION

During April, widespread breeding continued in Baluchistan where hoppers and groups were present in the interior from Khuzdar (2749N/6639E) and Washuk (2744N/6448E) north to Nushki (2933N/6601E), Dalbandin (2856N/6430E) and in the Chagai Hills on the Afghan border, in central areas near Panjgur (2658N/6406E), and along the coast and subcoastal areas from Gwadar (2508N/6219E) and Pasni (2515N/6328E) to Turbat (2600N/6303E). A hopper band was reported at Nushki. Adults formed groups that were maturing and a second generation of laying commenced after mid-month in the north near Dalbandin. In the Indus Valley, hopper groups and bands were maturing and forming immature adult groups in Rajanpur, Kashmore, and Dera Bugti districts north of Sukkur (2742N/6854E). Breeding caused hopper groups and bands to form on the Punjab Plains and in Khyber Pakhtunkhwa north of Dera Ismail Khan (7055N/3150E) in Lakki Marwat district. Hopper groups were present on the Indian border in Ghotki (Sindh) and Bahawalnagar (Punjab) districts. Control operations treated 50 289 ha of which 4 600 ha were by air.

• FORECAST

Current hopper groups and bands will form immature groups and small swarms in Baluchistan, the Indus Valley, Punjab and Khyber Pakhtunkhwa that will move to Tharparkar, Nara and Cholistan during May and June. Limited second-generation hatching will occur in northern Baluchistan, causing hopper groups and bands to form. Additional groups and swarms from spring breeding areas are expected to arrive along the Indo-Pakistan border during June.

INDIA

• SITUATION

During April, first and second instar solitary hoppers and groups were seen on the Pakistani border between Sri Ganganagar (2955N/7353E) and Fazilka (3024N/7402E) in Punjab, and on the border in Rajasthan northwest of

Jaisalmer (2652N/7055E). Ground teams treated 1 970 ha.

• FORECAST

A few small swarms from spring breeding areas are likely to appear in Rajasthan from early May onwards, which is expected to increase during the remainder of May and June.

AFGHANISTAN

• SITUATION

On 14 April, a mature gregarious adult group from adjacent areas of Iran appeared in the southwest province of Nimruz and was seen copulating near the Helmand River in Charburjak district (ca. 3016N/6203E) south of Zaranj (3057N/6151E). On the 25th, mature groups were reported northeast of Zaranj in Chakhansor district. Ground teams treated 20 ha.

• FORECAST

Hatching is likely to occur by early May that could cause small hopper groups and bands to form in Nimruz. Breeding is likely along the southern Helmand near the Chagai Hills. Adults may move northwards in Nimruz, Helmand and Kandahar provinces.



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 regularly every three days.

Bulletins. Affected countries are encouraged to prepare decadal and monthly bulletins summarizing the situation and share them with other countries.

Reporting. All information should be sent by e-mail to the FAO Desert Locust Information Service (eclo@fao.org and faodlislocust@gmail.com). Reports received by the first two days of the new month will be included in the FAO Desert Locust Bulletin; 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.

Desert Locust upsurge and response

On 17 January, the Director-General of FAO activated the L3 protocols, the highest emergency level in the United Nations system, in FAO to allow fast-tracking an effective response to the upsurge in the Horn of Africa. See www.fao.org/locusts for more details.

New eLocust3 tools

FAO has developed three new free tools for improving Desert Locust survey and control reporting: eLocust3g, eLocust3m, eLocust3w (<http://www.fao.org/ag/locusts/en/activ/DLIS/eL3suite/index.html>). Each tool allows the recording of basic survey and control data in the field while offline that is shared within the country.

Locust Hub

FAO in partnership with ESRI has developed a centralized hub for Desert Locust data and the latest progress on the emergency response to the Desert Locust upsurge (<https://locust-hub-hqfao.hub.arcgis.com>).

Calendar

The following activities are scheduled:

- **CRC/SWAC/DLIS.** Central Region and SWAC Desert Locust Information Officer workshop, Cairo, Egypt (postponed)
- **CLCPRO/DLIS.** Western Region Desert Locust Information Officer workshop, Dakar, Senegal (postponed)



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

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, Sierra 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/ESRI Locust Hub. Desert Locust maps and data download, and emergency response progress
<https://locust-hub-hqfao.hub.arcgis.com>

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

NASA WORLDVIEW. Satellite imagery in real time
<https://worldview.earthdata.nasa.gov>

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

eLocust3 suite. Digital tools for data collection in the field (mobile app, web form, GPS)
<http://www.fao.org/ag/locusts/en/activ/DLIS/eL3suite/index.html>

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>

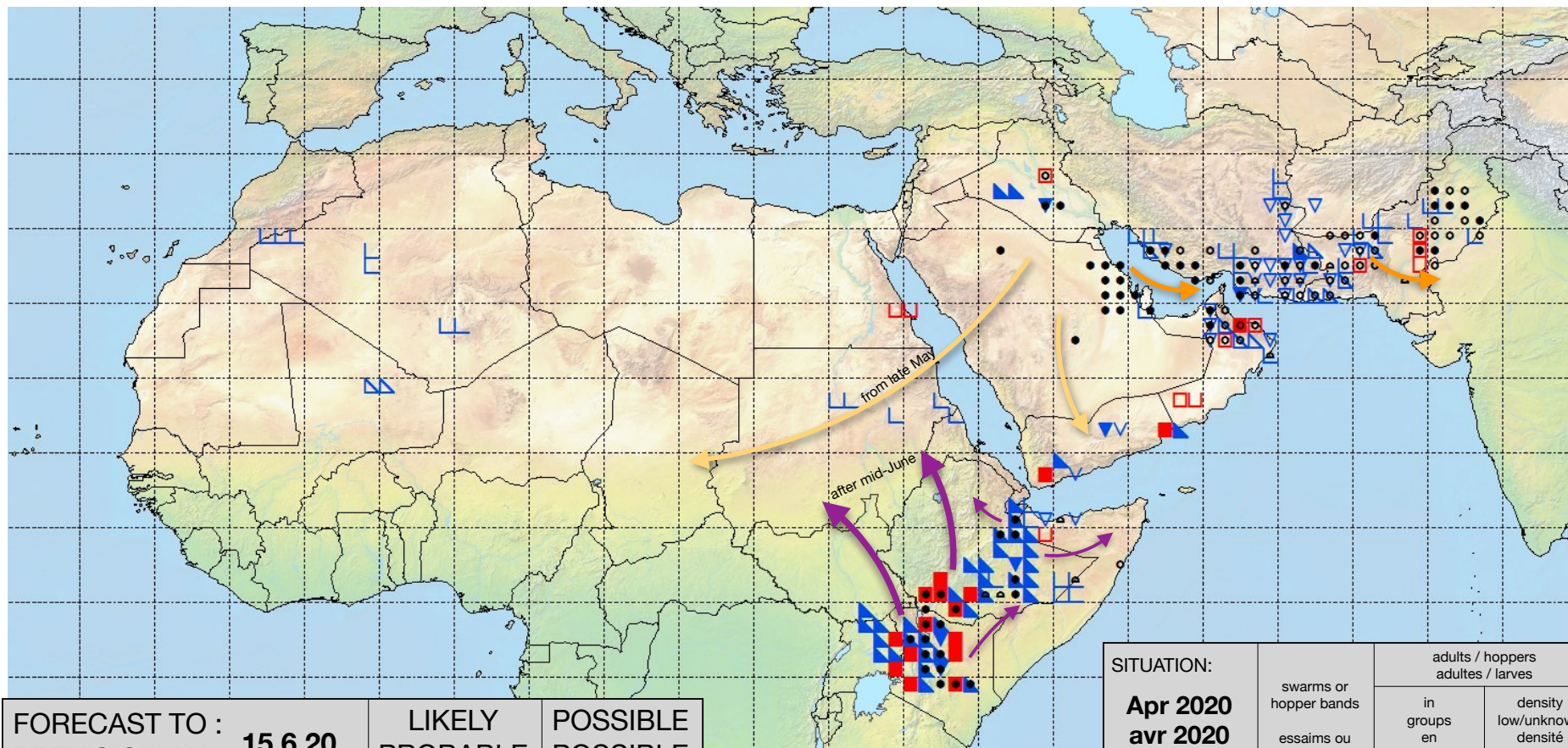
FAOLocust Slideshare. Locust presentations and photos
<http://www.slideshare.net/faolocust>

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 : 15.6.20 | LIKELY PROBABLE | POSSIBLE POSSIBLE |
|---|--------------------|----------------------|
| favourable breeding conditions conditions favorables à la reproduction | | |
| major swarm(s) essaim(s) important(s) | | |
| minor swarms(s) essaim(s) limité(s) | | |
| non swarming adults adults non essaimant | | |

| SITUATION: Apr 2020 avr 2020 | 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 partially 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 example) larves et adultes (symboles combinés) | | | |