Food and Agriculture Organization of the United Nations

No. 498 4 APRIL 2020

Desert Locust Bulletin

General situation during March 2020
Forecast until mid-May 2020

WESTERN REGION: CALM

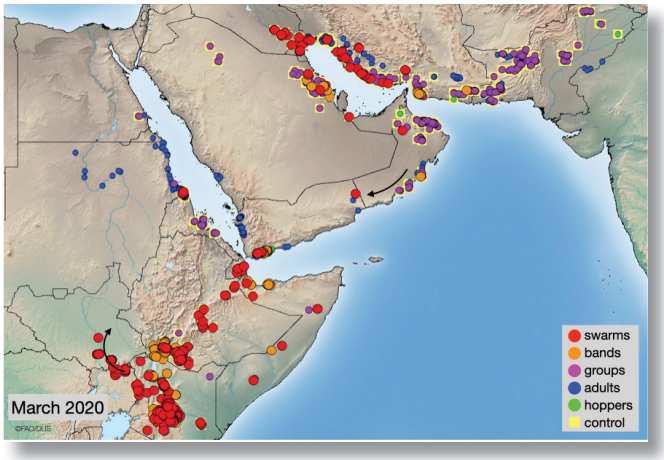
SITUATION. Scattered locusts in central **Algeria**, southwest **Libya**, and northern **Mali**.
FORECAST. Limited breeding possible in **Morocco**, **Algeria** and **Libya**.

CENTRAL REGION: THREAT

SITUATION. Control operations against laying swarms, new-generation hopper bands and immature swarms in **Kenya** (33 968 ha treated), **Ethiopia** (39 656 ha) and **Somalia** (159 ha); mature swarms in **Uganda** (607 ha); a few hopper bands and swarms in **Djibouti**. Locusts declined in Red Sea winter areas of **Sudan** (870 ha), **Eritrea** (5 640 ha), **Egypt** (15 ha) and Saudi Arabia. Swarms in **Iraq** (1 625 ha) and **Kuwait** (21 ha); a group in **UAE** (2 ha); adult groups and hopper bands in northeast **Saudi Arabia** (10 390 ha); hopper and adult groups in **Oman** (1 657 ha); bands and swarms in southern **Yemen** (3 190 ha).
FORECAST. More swarms will form, mature and lay eggs in **Kenya**, **Ethiopia**, and **Somalia** with hatching and band formation in May. Limited swarm movement north to **South Sudan** and Ethiopia. Breeding is likely in **Yemen**, **Oman,** and northeast **Saudi Arabia**, giving rise to hopper bands.

EASTERN REGION: THREAT

SITUATION. Swarm breeding in southwest **Iran**, hopper bands in the southeast (39 677 ha treated). Adult groups breeding in Baluchistan and Indus Valley, **Pakistan** and hopper groups formed (27 675 ha treated).
FORECAST. More band and swarm formation in southern **Iran** and southwest **Pakistan**. Second generation of breeding to commence by mid-May, causing a further increase in locust numbers.



Widespread rains to cause a further deterioration in the situation

Widespread rains could allow a dramatic increase in locust numbers in East Africa, eastern Yemen and southern Iran. The current situation in East Africa remains extremely alarming as hopper bands and an increasing number of new swarms are forming in Kenya, southern Ethiopia and Somalia. This represents an unprecedented threat to food security and livelihoods because it coincides with the beginning of the long rains and the planting season. Although ground and aerial control operations are in progress, widespread rains that fell in late March will allow the new swarms to mostly remain, mature and lay eggs while a few swarms could move from Kenya to Uganda, South Sudan and Ethiopia. During May, the eggs will hatch into hopper bands that will form new swarms in late June and July, which coincides with the start of the harvest. The situation in Iran and Yemen is becoming increasingly worrisome. Swarms laid eggs along 900 km of coast in southwest Iran that are hatching and hopper bands are forming. The widespread heavy rains that fell in late March will allow another generation of breeding and a further increase in locusts during May, which will extend to Baluchistan, Pakistan. Locusts will also increase and hopper bands will form along the southern coast and in the interior of Yemen from the March rains and subsequent breeding.

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.
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Weather & Ecological Conditions in March 2020

Widespread and heavy rains fell during the third decade in the Horn of Africa, eastern Yemen, and southern Iran that will allow another generation of breeding to occur in the coming months.

WESTERN REGION

No significant rain fell in the region except for a few showers during the last decade in some areas along the southern side of the Atlas Mountains in Morocco. Conditions remained dry and unfavourable for breeding but green vegetation persisted near Ghat in southwest Libya.

CENTRAL REGION

In the spring breeding areas, light showers fell along the Persian Gulf coast at times during March and light rain occurred along the border of Saudi Arabia and Yemen near Sharawrah at mid-month. During the third decade, good rains fell along the southern coast of Yemen near Aden, in Wadi Hadhramaut and the eastern region that caused some flooding. Good rains also fell in northern Oman. Consequently, breeding conditions were becoming favourable in eastern Yemen. In the winter breeding areas, vegetation dried out along both sides of the Red Sea but conditions remained favourable on the Buri Peninsula in Eritrea and along the Tihama in Yemen. In Eastern Africa, good rains fell during the first two decades in southern Ethiopia and northwest Kenya. Widespread moderate to heavy rains fell during the third decade in Kenya, southern and eastern Ethiopia, and Somalia that will allow another generation of breeding to occur in the coming months.

EASTERN REGION

During the first two decades of March, good rains fell in Khyber Pakhtunkhwa province of northern Pakistan and in the Jaz Murian Basin in southeast Iran while light showers fell along parts of the southwest coast of Iran. During the third decade, widespread heavy rains fell throughout southern Iran except for the extreme southeast near Chabahar where light rains occurred that extended to coastal and interior areas of Baluchistan, Pakistan. Good rains also fell again in Khyber Pakhtunkhwa. Consequently, ecological conditions were extremely favourable in all spring breeding areas of southern Iran and southwest Pakistan for locust breeding and survival.

Area Treated

Control operations treated 165 000 ha in March compared to 136 000 ha in February.

Egypt	15 ha
Eritrea	5 640 ha
Ethiopia	50 350 ha (February, revised)
	39 656 ha
Iran	39 676 ha
Iraq	1 625 ha
Kenya	15 278 ha (February, revised)
	33 968 ha
Kuwait	21 ha
Oman	1 657 ha
Pakistan	27 675 ha
Saudi Arabia	10 390 ha
Somalia	159 ha
Sudan	870 ha
UAE	2 ha
Uganda	3 467 ha (February)
	607 ha
Yemen	3 190 ha

Desert Locust Situation and Forecast

WESTERN REGION

Mauritania

• **SITUATION**

No locusts were reported during February and March.

• **FORECAST**

No significant developments are likely.

Mali

• **SITUATION**

During March, isolated mature solitarious adults were present in the Tilemsi Valley to the west of Aguelhoc (1927N/0052E) and Tessalit (2011N/0102E).

• **FORECAST**

Low numbers 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 March.

• **FORECAST**

No significant developments are likely.

Chad

• **SITUATION**

No locusts were reported during March.

• **FORECAST**

No significant developments are likely.

Burkina Faso

• **SITUATION**

No reports were received during March.

• **FORECAST**

No significant developments are likely.

Senegal

• **SITUATION**

No locusts were reported during March.

• **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 March, isolated mature solitarious adults were present in a few places of the Central Sahara between El Golea (3034N/0252E) and Adrar (2753N/0017W).

• **FORECAST**

Low numbers of locusts are likely to persist in parts of the central Sahara where local breeding is likely to occur in areas that receive rainfall.

Morocco

• **SITUATION**

During March, no locusts were seen in the Western Sahara south of Zag (2800N/0920W) and along the Draa Valley from Foum El Hassan (2901N/0853W) to Tata (2944N/0758W) and near Erfoud (3128N/0410W).

• **FORECAST**

Small-scale breeding is likely to occur in some places of the Draa Valley along the southern side of the Atlas Mountains.

Libya

• **SITUATION**

During March, isolated solitarious immature and mature adults were present in the southwest near Ghat (2459N/1011E) and the Algerian border. No locusts were seen further north near Ghadames (3010N/0930E) and on the Al Hamada Al Hamra plateau.

• **FORECAST**

Small-scale breeding is likely to occur in the southwest near Ghat if more rains fall.

Tunisia

• **SITUATION**

No locusts were reported during March.

• **FORECAST**

No significant developments are likely.

CENTRAL REGION

Sudan

• **SITUATION**

During March, locusts declined on the Red Sea coast as conditions dried out. A residual hopper band and immature adult group were present on the southern coast early in the month, and a few immature and mature swarms appeared near the Eritrean border at mid-month. In the Tokar Delta, a mature group was laying on the 9th. Low numbers of immature and mature solitarious adults were scattered elsewhere along parts of the coast as far north as the Egyptian border. In the Nile Valley, scattered mature solitarious adults were present near Abu Hamed (1932N/3320E), Karima (1832N/3148E), and Dongola (1910N/3027E) as well as near Selima Oasis (2122N/2119E). Ground teams treated 870 ha.

• **FORECAST**

Locusts will decline further on the Red Sea coast. Small-scale breeding could occur in the Nile Valley.

Eritrea

• **SITUATION**

During March, groups of hoppers and immature adults were present on the southern coast of the Red Sea near Tio (1441N/4057E), on the Buri Peninsula north of Ghelaelo (1507N/4004E), on the central coast near Massawa (1537N/3928E), and on the northern coast near the Sudanese border. Similar infestations were also seen in the Dahlak Islands, most probably as a result of swarm migration from Yemen in about mid-January. Ground teams treated 5 640 ha.

• **FORECAST**

Locusts will decline on the Red Sea coast as conditions dry out and any remaining adults move northwards.

Ethiopia

• **SITUATION**

During March, hopper groups and bands continued to form in the south, mainly in southern parts of SNNPR (South Omo, Konso districts) and Oromiya (Borena) regions. Numerous immature and mature groups and swarms from earlier breeding and from adjacent areas of southern Somalia were also present in the south as well as in northern Oromiya (Arsi and Bale). Further north, a few immature and mature swarms were seen between Dire Dawa (0935N/4150E) and the Djibouti border on the 31st. Control operations treated 39 656 ha of which 20 962 ha were by air.

• **FORECAST**

Widespread breeding will continue to cause hopper bands and swarms to form in southern regions, which is likely to be supplemented by cross-border movements of swarms along the Somali and Kenyan border. Breeding is also like to take place in areas of recent rains in the Ogaden (Warder, Gode, Afder) and eastern areas (Jijiga, Dire Dawa). Southerly winds could carry swarms further north into central and northern areas of the country where breeding could occur in areas that receive rains.

Djibouti

• **SITUATION**

A late report clarified that mature gregarious adults were present on the coast near Tadjourah (1147N/4253E) and in the interior northwest of Obock (1154N/4317E) in early February.

During March, hopper bands and immature swarms were seen on the coast between Tadjourah and Obock, and a few swarms were seen near Djibouti (1134N4309E) and south of Arta (1131N/4251E).

• **FORECAST**

Breeding may occur in areas of recent rainfall in the southern interior near Yoboki.

Somalia

• **SITUATION**

During the first week of March, mainly late instar hopper groups and bands were present on the northwest coast, a mature swarm was seen nearby, and adult groups were laying east of Berbera (1028N/4502E). In the northeast, a few hopper groups, bands and a mature swarm were reported near Garowe (0824N/4829E). In central areas, a hopper band was reported north of Belet Weyne (0444N/4512E) and a mature swarm was laying near Dusa Mareb (0532N/4623E) on the 18th. In the south, an immature swarm was seen at mid-month west of Mogadishu (0202N/4520E).

• **FORECAST**

Locust numbers will increase further from breeding that is likely to occur as a result of recent rains on the coast and plateau in the northwest, and in central and southern areas from Garowe to the Kenyan border. As a result, hatching and numerous hopper bands are expected during the forecast period.

Kenya

• **SITUATION**

During March, numerous hopper bands continued to develop in the centre and north, causing an increasing number of immature swarms to form and mature. Infestations were present in some 18 counties, primarily Turkana, Marsabit, Samburu, Isiolo, Laikipia, Meru and Embu. Ground and aerial control operations treated 33 968 ha.

• **FORECAST**

An increasing number of swarms will form and mature during April in central and northern counties. A second generation of breeding will commence in early April as mature swarms lay eggs that will begin to hatch by the end of the month. Laying, hatching and band formation will continue throughout the forecast period. Most of the breeding is likely to be concentrated in northern counties of Turkana, Marsabit, Samburu, and Isiolo.

Tanzania

• **SITUATION**

No locusts were reported.

• **FORECAST**

The risk of any additional swarms arriving from the north is extremely low due to prevailing southerly winds. No significant developments are likely.

South Sudan

• **SITUATION**

During March, several mature swarms arrived from the south in the Torit (0424N/3234E) area at mid-month. At least one swarm continued flying to the northwest and reached Juba (0451N/3134E) on the 21st, continued north to Bor (0613N/3134E) and then flew towards Ethiopia on the 23rd. A mature swarm was reported near the Uganda border and Loboni Payam (0350N/3244E) on the 29th.

• **FORECAST**

A few new-generation swarms could arrive in Eastern Equatoria from western Kenya and continue northwards.

Uganda

• **SITUATION**

During the first week of March, mature swarms were seen in several northeastern districts near the Kenyan border south of Moroto (0231N/3439E) as well as further north near the South Sudanese border betweeen Kitgum (0318N/3253E) and the Kenyan border. The last swarm was reported on the 15th just south of the South Sudanese border in Madi Opei district. Ground teams treated 607 ha.

• **FORECAST**

Successful 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.

D.R. Congo

• **SITUATION**

No locusts were reported.

• **FORECAST**

No significant developments are likely.

Egypt

• **SITUATION**

During March, a few late instar hopper groups were present on the Red Sea coast in the southeast near El Sheikh El Shazly (2412N/3438E) early in the month that fledged into scattered immature solitarious adults. No locusts were seen elsewhere near Lake Nasser and on the Red Sea coast except for immature solitarious adults west of Abu Ramad (2224N/3624E). Ground teams treated 15 ha.

• **FORECAST**

Locusts will decline on the Red Sea coast. No significant developments are likely.

Saudi Arabia

• **SITUATION**

During March, only a few scattered mature solitarious adults remained in winter breeding areas on the Red Sea coast near Qunfidah (1909N/4107E). In the spring breeding areas of the interior, a mature swarm was present on the 3rd and again on the 15th near the Persian Gulf north between Al Hofuf (2523N/4935E) and Qaryat Al Ulya (2733N/4742E) where adult groups were laying during the first half of the month. By the end of the month, hatching had occurred and several first instar hopper bands had formed. Groups of mature adults were present in the north between Hail (2731N/4141E) and Al Jawf (2948N/3952E). No locusts were seen elsewhere along the Red Sea coast or in the interior, including near the Iraqi border at Rafha (4331N/2938E). Ground teams treated 10 390 ha.

• **FORECAST**

Additional hatching will occur in early April that is likely to cause small hopper bands to form near the Persian Gulf. Fledging should start in early May, giving rise to immature groups and perhaps a few small swarms. Breeding may also occur in the Al Jawf area.

Yemen

• **SITUATION**

During March, scattered immature and mature adults were present on the central Tihama coast of the Red Sea between Hodeidah (1450N/4258E) and Al Qutai (1454N/4312E) and on the northern Tihama between Al Zuhrah (1541N/4300E) and Suq Abs (1600N/4312E). Hopper groups and bands were present on the southern Gulf of Aden coast from west of Am Rija (1302N/4434E) to east of Zinjibar (1306N/4523E) that fledged, giving rise to several immature groups and swarms. Scattered immature and mature adults were seen further east along the coast near Ahwar (1333N/4644E) and Al Ghaydah (1612N/5210E). On the 31st, an immature swarm was seen in the eastern interior flying from east to west near Shehan (1746N/5229E) and the Oman border, and mature solitarious adults were present on the plateau near Hat (1719N/5205E). Ground teams treated 3 190 ha.

• **FORECAST**

Breeding will continue on the Red Sea and Gulf of Aden coasts, causing a further increase in locust numbers that will give rise to hopper groups, bands, adult groups and swarms. Breeding and band formation will also occur in the interior near Marib, in Wadi Hadhramaut, and on the eastern plateau where good rains fell recently. Swarm movement may occur in early April along the Omani border.

Oman

• **SITUATION**

During March, hatching continued on the Batinah coast between Muscat (2337N/5833E) and Jamma (2333N/5733E), and breeding extended into the northern interior from Buraimi (2415N/5547E) to Ibra (2243N/5831E) and Adam (2223N/5731E). Consequently, hopper groups formed in both areas as well as on the eastern coast between Duqm (1939N/5743E) and Marmul (1808N/5516E). Fledging occurred from mid-month onwards, causing several immature groups to form during the last week. On the 31st, an immature swarm was seen southwest of Ibri (2314N/5630E) while other immature groups were seen moving in the south near Thumrait (1736N/5401E). Ground teams treated 1 657 ha.

• **FORECAST**

Additional groups and a few small swarms are likely to form on the northern and eastern coast and in the northern interior, some of which could move southwards. Second-generation hatching will increase, which could give rise to hopper groups and small bands. Swarm movement may occur in early April along the Yemen border.

Iraq

• **SITUATION**

During the two decades of March, mature swarms were present in Basrah and Al Muthanna governorates where immature swarms were reported in February. The swarms spread to Thiqar governorate and were present between Samawah (3117N/4516E) and Basrah (3031N/4749E). Ground teams treated 1 625 ha.

• **FORECAST**

A few swarms may appear in Al Muthanna province during periods of southerly winds.

Kuwait

• **SITUATION**

On 1 March, several immature swarms were seen in Kuwait City that moved to the Al Abdali area (3001N/4742E) in the north of the country where they were treated (approximately 21 ha) on 3–4 March.

• **FORECAST**

A few groups or small swarms may appear during periods of southerly winds in May.

Bahrain

• **SITUATION**

No locusts were seen during surveys on 2–3 March.

• **FORECAST**

A few groups or small swarms may appear in May.

Qatar

• **SITUATION**

A late report indicated that medium to dense immature swarms were seen in different parts of the country on 20–25 February.

• **FORECAST**

A few groups or small swarms may appear in May.

UAE

• **SITUATION**

On 5 March, a groups of immature adults arrived west of Abu Dhabi near the Saudi Arabian border at Al Sila (2402N/5143E) and 2 ha were treated.

• **FORECAST**

A few swarms may appear during periods of southerly winds.

Jordan

• **FORECAST**

There is a low risk of a few immature swarms appearing from the south in May.

Israel, Lebanon, Palestine, Syria, and Turkey

• **FORECAST**

No significant developments are likely.

EASTERN REGION

Iran

• **SITUATION**

During March, adult groups and swarms laid eggs over a widespread area of the southern coast extending nearly 900 km from Iraq to Chab Deraz (2657N/5527E), comprising southern Khuzestan, Bushehr, Fars, and western Hormozgan provinces. A few immature groups and swarms were also seen along the southwest coast. By the end of the month, hatching had commenced and hoppers were forming groups and small bands. Breeding increased along the east Hormozgan coast between Minab (2708N/5705E) and Jask (2540N/5746E) where hopper groups and bands were present that started to fledge and form groups of immature adults at the end of the month. Breeding was underway near Chabahar (2517N/6036E) and the Pakistani border where hopper groups and bands were present. In the interior, breeding started in the Jaz Murian Basin where solitarious adults were laying near Bampur (2711N/6028E). Ground teams treated 39 676 ha of which 4 750 ha were by air.

• **FORECAST**

Locust numbers will increase as more hatching and bands form along the southwest and southeast coast and subcoastal areas where adult groups and swarms are expected to form in about mid-May. Another generation of breeding will occur near Jask where hatching and band formation could start by mid-May.

Pakistan

• **SITUATION**

During March, breeding continued in Baluchistan where widespread laying occurred in the north between Khuzdar (2749N/6639E), Nushki (2933N/6601E), and Dalbandin (2856N/6430E) by adult groups. Hopper groups of all instars were present south of the Afghan border, between Nushki, Kharan (2832N/6526E), and Washuk (2744N/6448E), south of Panjgur (2658N/6406E), in the Turbat (2600N/6303E) Valley, and on the coast near Pasni (2515N/6328E). By the end of the month, fledging had commenced and immature adults were forming a few groups. Hopper groups were also present in the Indus Valley districts of Rajanpur and Dera Bugti north of Sukkur (2742N/6854E). In Khyber Pakhtunkhwa, adult groups were seen laying at a few places north of Dera Ismail Khan (7055N/3150E) early in the month. In southern Punjab, scattered immature solitarious adults were seen in a few places in the Cholistan Desert along the Indian border near Islamgarh (2751N/7048E) during the last decade of March. Ground teams treated 27 675 ha of which 200 ha were by air.

• **FORECAST**

More hopper groups, bands, immature groups and perhaps a few small swarms will form in Baluchistan and the Indus Valley. The adults will mature and another generation of breeding will occur with laying and hatching before the end of the forecast period. Small hopper groups will form from hatching in Khyber Pakhtunkhwa.

India

• **SITUATION**

No locusts were seen in Rajasthan during March.

• **FORECAST**

No significant developments are likely.

Afghanistan

• **SITUATION**

No locusts were reported during March.

• **FORECAST**

There is a low to moderate risk that a few groups and small swarms could appear in southern provinces and perhaps breed on a limited scale in favourable areas.

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 km^2
- band: 1–25 m^2

Small
- swarm: 1–10 km^2
- band: 25–2,500 m^2

Medium
- swarm: 10–100 km^2
- band: 2,500 m^2 – 10 ha

Large
- swarm: 100–500 km^2
- band: 10–50 ha

Very large
- swarm: 500+ km^2
- 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/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

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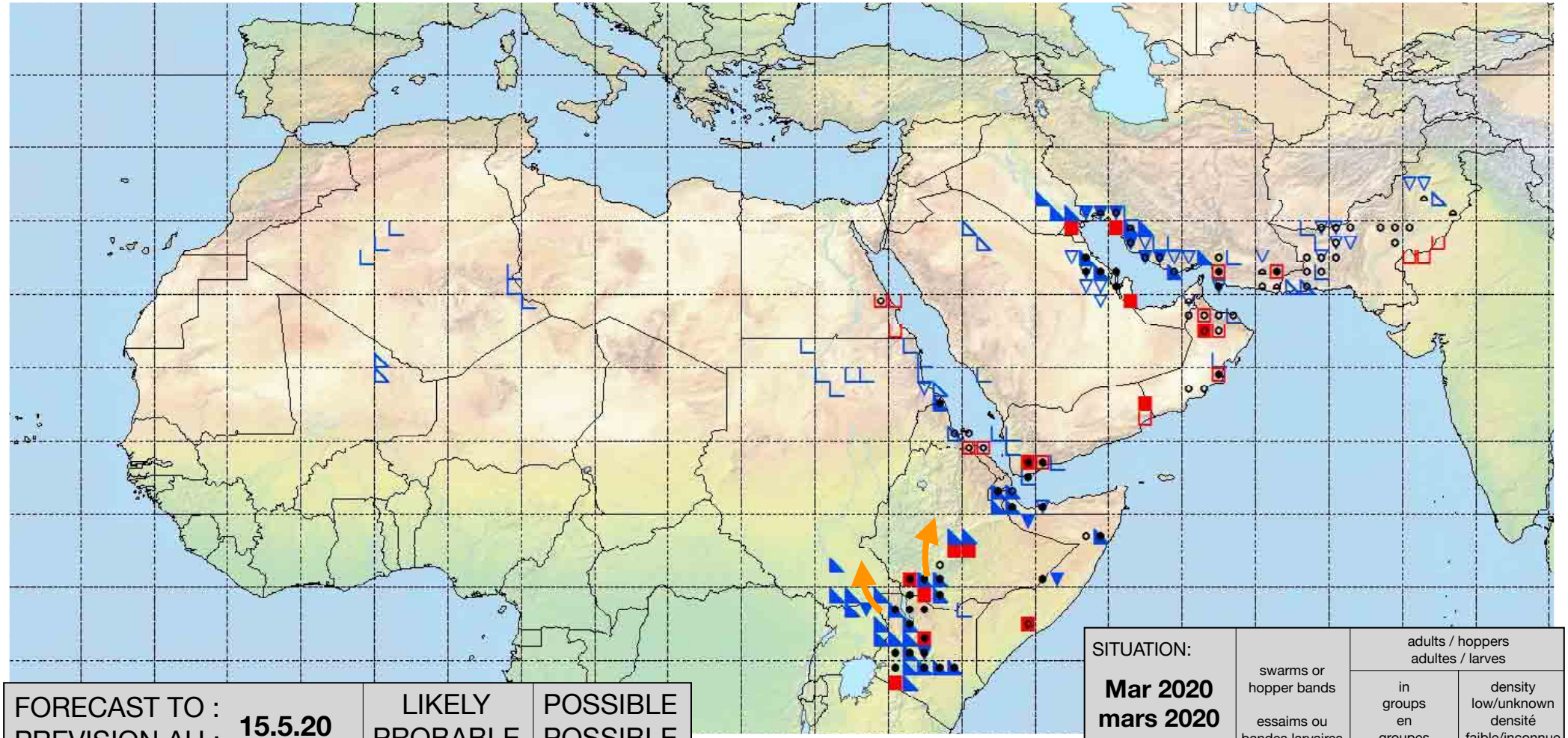

FORECAST TO : PREVISION AU : **15.5.20**	LIKELY PROBABLE	POSSIBLE POSSIBLE
favourable breeding conditions conditions favourables à la reproduction		
major swarm(s) essaim(s) important(s)		
minor swarms(s) essaim(s) limité(s)		
non swarming adults adults non essaimant		

SITUATION: **Mar 2020 mars 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)	◘	◙	⌓