



Desert Locust Bulletin

General situation during July 2020 Forecast until mid-September 2020

WESTERN REGION: CALM

SITUATION. Isolated adults in **Mauritania, Niger, Chad,** and **Algeria.**

FORECAST. Small-scale breeding in the northern Sahel from **Mauritania to Chad.**

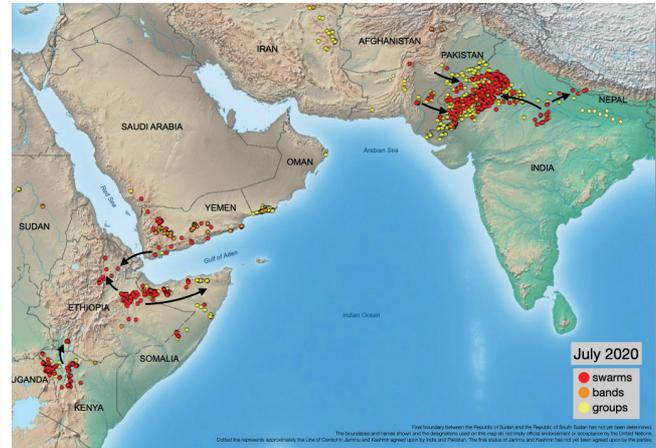
CENTRAL REGION: THREAT

SITUATION. Swarms decline after mid-July in northwest **Kenya** (12 080 ha treated), some move north to **Ethiopia** (44 883 ha) where swarms persist in north and east; hopper bands and swarms in northern **Somalia** (12 569 ha), some swarms move east. Few swarms in northeast **Uganda** (3 080 ha). Hopper bands and swarms in the interior and south coast of **Yemen** (10 718 ha); hopper bands on south coast of **Oman** (443 ha); adults and a mature adult group and swarm in southwest **Saudi Arabia** (440 ha). Scattered adults in **Sudan** (235 ha). **FORECAST.** Few residual swarms likely to remain in northwest **Kenya** but some may migrate to Ethiopia and Sudan via **South Sudan** in August. Swarm breeding will cause hopper bands to form in northern and eastern **Ethiopia**, coastal and interior **Yemen**, and perhaps northern **Somalia**. Widespread local breeding in **Sudan**. Other swarms likely to arrive in northeast Ethiopia from Yemen and a few swarms may arrive in **Eritrea** and breed.

EASTERN REGION: THREAT

SITUATION. Situation calms down in **Iran** (1 450 ha treated). Swarm breeding along Indo-Pakistan border with hatching and band formation in **Pakistan** (33 599 ha) and **India** (102 645 ha); swarms in northern states returned to Rajasthan, and one swarm reached **Nepal**. Limited breeding in eastern **Afghanistan** (304 ha).

FORECAST. Substantial increase in locust numbers in **India** and **Pakistan** during August with more hatching and band formation; a second generation of egg-laying to start from early September onwards.



Focus shifts to summer breeding areas

Second-generation spring swarms declined in northwest Kenya by mid-July. A few swarms crossed into northeast Uganda while other swarms migrated northwards to Ethiopia to join existing swarms, some of which moved into the northern Ethiopian highlands and northwest Somalia where hopper bands and swarms were already present. Some of the swarms that continued east across northern Somalia could still reach India and Pakistan in early August. Two swarms from Yemen invaded northeast Ethiopia. A few swarms may appear in Sudan and Eritrea where conditions became favourable for summer breeding. Unusually heavy rains fell again in Yemen where hopper bands and swarms continued to form, which is likely to continue. Widespread breeding is also expected in northern and eastern Ethiopia. Consequently, Ethiopia and Yemen are likely to be the epicentre of summer infestations. In southwest Asia, the situation has nearly returned to normal in Iran but remains serious along the Indo-Pakistan border where monsoon breeding commenced by spring-bred swarms, including those returning from northern India, and substantial hatching and band formation are expected in August. A second generation of summer breeding will start in September. At least one swarm reached Nepal and dispersed. Control operations were in progress in all affected countries. Although the threat to West Africa has nearly subsided for now, summer breeding will cause locust numbers to increase between Mauritania and Chad.

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 July 2020

Good rains fell in the summer breeding areas of the Sahel in West Africa and Sudan, in Ethiopia and Yemen, and along both sides of the Indo-Pakistan border, giving rise to favourable breeding conditions.

WESTERN REGION

The Inter-Tropical Convergence Zone (ITCZ) continued its seasonal movement northwards over the Sahel of West Africa during July. At the end of the second decade, it had reached central Tagant (Mauritania), Kidal (Mali), Tazerzait Plateau in northern Tamesna (Niger), and Faya and Fada (Chad), which was some 75–150 km further north than usual in Niger and Chad and up to 50 km further south in Mauritania and Niger. Consequently, good rains fell in nearly all summer breeding areas, causing ecological conditions to become favourable for breeding. In Mauritania, light to moderate rains fell in Assaba and the two Hodhs during the first decade followed by heavier and more widespread rains in the second decade, extending to Brakna and southern Tagant as well as north of Oualata to the El Mreyye sand sea. Annual vegetation became green by mid-month from Kiffa to Nema. In Mali, moderate rains fell during the second decade south of Araouane, Ti-n-kar, Kidal, and in parts of Tamesna while lighter rains fell in the Adrar des Iforas. Annual vegetation was becoming green at mid-month in parts of the Adrar des Iforas and Tamesna. In Niger, light to moderate rains fell during the first decade between Tahoua and Tanout and south of Tasker where annual vegetation became green at mid-month. This was followed by heavier and more widespread rains in the second decade, extending east across the central pasture areas to Ngourti and north to the Air Mountains and the southern Tamesna Plains while lighter rains fell as far north as In Abangharit. In Chad, light to moderate rains fell in central areas during the first decade, followed by heavier and more widespread rains in the second decade, extending to Kalait in the northeast. Annual vegetation became green by mid-month as far north as Kalait. Accordingly, ecological conditions were favourable for breeding by the end of the month in most areas of the Sahel. In Northwest Africa, conditions were dry except near irrigated agricultural perimeters in parts of the central Sahara in Algeria and in the extreme south near In Guezzam and the Niger border.

CENTRAL REGION

The Inter-Tropical Convergence Zone (ITCZ) continued its seasonal movement northwards over the summer breeding areas of Sudan, reaching the northern border of North Kordofan and Shendi in the Nile Valley by the end of the second decade, which is up 100 km further north than usual for this time of year. Consequently, moderate rains

fell during the first decade as far north as El Fasher in North Darfur and Sodiri in North Kordofan and eastwards to south of Kassala and to the western lowlands in Eritrea south of Teseney. As a result, annual vegetation became green south of El Fasher and Sodiri by mid-month, and conditions were favourable for breeding. In Ethiopia, moderate rains fell during both decades in the Harar Highlands and throughout the highlands of Amhara and Tigray while lighter showers fell in the northern Rift Valley from the border of northwest Somalia to south of the Danakil Depression in Afar, extending to parts of Djibouti and northwest Somalia. Accordingly, ecological conditions remained favourable for breeding in Amhara, Tigray, and Afar but was drying out in Somali region as well as in northern and central Somalia. In Kenya, vegetation remained mostly green in the northwest despite very little rain during July. In Yemen, widespread light to moderate rains fell throughout the month in coastal and interior areas. At times, heavier rains occurred, causing flooding in Al Jawf, Marib, Shabwah, Hadhramaut, and Lahij provinces. Ecological conditions remained favourable for continued breeding in all areas. In Oman, light to moderate rains fell at times in the central interior and the eastern coast, including monsoon showers near Salalah and the Dhofar Hills.

EASTERN REGION

Monsoon rains reached the western edge of the summer breeding areas along both sides of the Indo-Pakistan border by 26 June, which is nearly two week earlier than normal. So far, rainfall has varied from below-normal to normal in Rajasthan where above-normal pre-monsoon rains fell in June. During July, light to moderate rains fell in most areas while heavier rains fell during the first decade in Rajasthan from Churu and Bikaner to Jaisalmer and the Pakistan border. This caused ecological conditions to become favourable for breeding within a widespread area on both sides of the border in Rajasthan and northern Gujarat in India and in Tharparkar, Nara and Cholistan deserts in Pakistan.



Area Treated

Control operations treated	222 446 ha in July compared to some 331 126 ha in June.
Afghanistan	304 ha
Ethiopia	79 574 ha (June, revised) 44 883 ha
India	102 645 ha
Iran	1 450 ha
Kenya	38 769 ha (June, revised) 12 080 ha
Oman	443 ha

Pakistan	33 599 ha
Saudi Arabia	440 ha
Somalia	12 569 ha
Sudan	235 ha
Uganda	3 080 ha
Yemen	10 718 ha



Desert Locust Situation and Forecast

WESTERN REGION

MAURITANIA

• SITUATION

During July, isolated mature solitary adults, mixed with a few immature adults, were present in the south near Kiffa (1638N/1124W) in Assaba, near Nema (1636N/0715W) in Hodh Ech Chargui, and east of Tidjikja (1833N/1126W) in Tagant.

• FORECAST

Small-scale breeding will commence in areas of recent rainfall in the south where normal to above-normal rains are predicted during the first half of August in central and eastern areas. Consequently, locust numbers will increase slightly but remain below threatening levels.

MALI

• SITUATION

No locusts were reported during July.

• FORECAST

Small-scale breeding will commence in areas of recent rainfall in Tamesna, the Adrar des Iforas, Tilemsi Valley, and Timetrine where above-normal rains are predicted during the first half of August. Consequently, locust numbers will increase slightly but remain below threatening levels.

NIGER

• SITUATION

During July, isolated immature and mature solitary adults were present in central pasture areas near Tasker (1507N/104140E) and south of Agadez (1658N/0759E) as well as in the Air Mountains to the south and east of Timia (1809N/0846E).

• FORECAST

Small-scale breeding will commence in areas of recent rainfall in the central pasture areas and on the Tamesna Plains where above-normal rains are predicted during the first half of August. Consequently, locust numbers will increase slightly but remain below threatening levels.

CHAD

• SITUATION

During July, isolated immature and mature solitary adults were seen in the northeast near Kalait (1550N/2054E) and

south of Amdjarass (1604N/2250E) from the 9th onwards, and in the west near Mao (1406N/1511E) and Nokou (1435N/1446E) after mid-month. Isolated breeding occurred south of Amdjarass where late instar solitary hoppers were present during the second week.

• FORECAST

Small-scale breeding will commence in areas of recent rainfall in western, central, and eastern areas, where above-normal rains are predicted during the first half of August. Consequently, locust numbers will increase slightly but remain below threatening levels.

SENEGAL

• SITUATION

No reports were received during July.

• FORECAST

No significant developments are likely.

BENIN, BURKINA FASO, CAMEROON, CAPE VERDE, CÔTE D'IVOIRE, GAMBIA, GHANA, GUINEA, GUINEA BISSAU, LIBERIA, NIGERIA, SIERRA LEONE, AND TOGO

• FORECAST

No significant developments are likely.

ALGERIA

• SITUATION

During July, scattered immature solitary adults were seen in the northern Sahara to the south of Al Baydha (1405N/4542E) and in the central Sahara near the Adrar Valley (2753N/0017W). No locusts were seen in the southeast near Djanet, in the south near Tamanrasset (2250N/0528E), along the Mali border near Bordj Badji Mokhtar (2119N/0057E), and along the Niger border near Guezzam (1934N/0546E).

• FORECAST

Low numbers of adults are likely to persist near cropping areas in the central Sahara.

MOROCCO

• SITUATION

No locusts were reported during July.

• FORECAST

No significant developments are likely.

LIBYA

• SITUATION

No reports were received during July.

• FORECAST

No significant developments are likely.

TUNISIA

• SITUATION

No locusts were reported during July.

• FORECAST

No significant developments are likely.

CENTRAL REGION

SUDAN

• SITUATION

During July, mostly scattered immature solitary adults were present in the Nile Valley from Shendi to north of Dongola while mature solitary adults were present in North Kordofan, White Nile, Khartoum, and Kassala States as well as on the western side of the Red Sea Hills. Limited breeding occurred along the Nile and Atbara rivers where groups of hoppers, immature and mature adults were present near Merowe and hopper bands and immature adult groups were reported near Atbara. Ground teams treated 235 ha.

• FORECAST

Small-scale breeding will occur in parts of West and North Darfur, West and North Kordofan, White Nile and Kassala states where above-normal rains are predicted during the first week of August. There remains a moderate risk that a few swarms from Kenya and Ethiopia may arrive during August in Kordofan, White Nile, Blue Nile and Sennar where they will rapidly mature and lay eggs, giving rise to hopper bands.

ERITREA

• SITUATION

A late report indicated that no locusts were seen during a survey in the western lowlands at the end of June. On 30–31 July, no locusts were seen in the western lowlands near the Ethiopia border.

• FORECAST

Local breeding is expected to occur in areas of recent rainfall in southern areas of the western lowlands where above-normal rains are predicted during the first week of August. This could be supplemented by any swarms that arrive from northern Ethiopia and lay eggs during August, which would give rise hopper groups and bands.

ETHIOPIA

• SITUATION

During the first half of July, immature swarms appeared in the southwest of SNNPR to the west of Teltele (0504N/3723E), most likely coming from adjacent areas of northwest Kenya. Immature swarms were also reported at times during the month in the Ogaden west of Kebri Dehar (0644N/4416E), in the Harar Highlands, near Dire Dawa (0935N/4150E), and Jijiga (0922N/4250E), in the Awash Valley, and in the northern highlands south of Dese (1108N/3938E) in Amhara and northeast of Korem (1230N/3931E) in Tigray. Swarm numbers appeared to decline after mid-month. Nevertheless, a swarm arrived in the southern Rift Valley west of Teltele (0504N/3723E) from northwest Kenya on the 25th, several swarms moved from the Harar Highlands and districts in east Oromiya and Somali to northwest Somalia, swarms moved from Afar to Amhara, and two swarms from Yemen arrived in Afar

near Semera (1147N/4100E) on the 29th and 30th. Control operations treated 44 883 ha of which 44 763 ha were by air.

• FORECAST

A few remaining swarms from northwest Kenya could arrive in the south and move northwards to Somali, Afar, Amhara and Tigray regions. Breeding is expected to occur in the northern highlands (Amhara, Tigray), the northern Rift Valley (Afar), and in the northern Somali region near Dire Dawa and Jijiga, which will give rise to hopper bands. Breeding may also extend to the Ogaden where above-normal rains are predicted during August.

DJIBOUTI

• SITUATION

No surveys were undertaken, and no locusts were reported during July.

• FORECAST

A few groups and small swarms may appear at times from Yemen and transit through the country to Ethiopia and Somalia.

SOMALIA

• SITUATION

During the first half of July, mid to later instar hopper bands were present on the northern plateau near Burao (0931N/4533E) while hopper groups were seen further east near Garowe (0824N/4829E) and towards the southeast, and a mature adult group and swarm were reported near Garowe. Numerous immature adult groups and swarms were seen on the plateau near Hargeisa (0931N/4402E) and Burao, extending east to Erigavo (1040N/4720E). By mid-month, some of the adult groups had matured and were seen laying east of Erigavo. Thereafter, immature swarms prevailed in the northwest near Hargeisa and at least one swarm had matured north of Boroma (0956N/4313E). In the central region of Galguduud, mature swarms were reported near Dusa Mareb (0532N/4623E) and scattered immature and mature adults were seen nearby. Control operations using biopesticides treated 12 569 ha of which 8 544 ha were by air.

• FORECAST

Additional swarms may concentrate on the northern plateau where most of them are likely to remain immature. However, adults may mature and breed as above-normal rains are predicted in the entire north up to mid-August and thereafter only in the northwest.

KENYA

• SITUATION

During July, immature swarms continued to be present in the northwest counties of Turkana and Marsabit with a few reports of swarm maturation. From mid-month onwards, swarms appeared to decline in Marsabit while a few swarms were seen in Samburu county and most of the remaining

swarms present in Turkana concentrated near the Uganda border. Control operations treated 12 080 ha of which 11 667 ha were by air.

• FORECAST

A few swarms may persist in early August; thereafter, only remnants of previous swarms are likely to persist in the northwest where they could eventually mature and perhaps breed as above-normal rains are predicted during the forecast period.

UGANDA

• SITUATION

During July, a few immature swarms from adjacent areas of northwest Kenya appeared to the north of Moroto (0231N/3439E) in the northeast (Karamoja) on the 1st, 6th, 12th and 22nd. Control operations treated 3 080 ha by air.

• FORECAST

A few swarms may arrive at times in Karamoja from adjacent areas of Kenya during August.

SOUTH SUDAN

• SITUATION

No reports were received during July.

• FORECAST

Several immature swarms from northwest Kenya are expected to arrive in early August near Kapoeta and in other areas of Eastern Equatoria where they will continue northwards to Sudan.

EGYPT

• SITUATION

During July, no locusts were seen on the Red Sea coast and subcoastal areas in the southeast between Berenice (2359N/3524E) and Abu Ramad (2224N/3624E), and near Lake Nasser between Abu Simbel (2219N/3138E) and Tushka (2247N/3126E).

• FORECAST

No significant developments are likely.

SAUDI ARABIA

• SITUATION

During July, scattered mature solitarious adults were present in the southwest near Najran (1729N/4408E) and in the Asir Mountains to the north and south of Khamis Mushait (1819N/4245E). A mature adult group was seen in the Asir Mountains north of Khamis Mushait on the 1st and a mature swarm was seen to the southeast on the 6th. Ground teams treated 440 ha on 1–6 July.

• FORECAST

Breeding may occur in areas that receive rainfall on the Red Sea coast between Qunfidah and Jizan where hopper groups and bands could form.

YEMEN

• SITUATION

During July, breeding continued and numerous hopper groups and bands were present in the central highlands south of Sana'a (1521N/4412E), in the wadis leading down from the highlands to the western edge of Ramlat Sabatyn between Al Hazm (1610N/4446E) and Nisab (1430N/4629E), in Wadi Hadhramaut, on the plateau north of Mukalla (1431N/4908E), and along the eastern coast between Sayhut (1512N/5115E) and Al Ghaydah (1612N/5210E). Immature and mature adult groups and swarms were present in most of these areas as well as in the northern highlands near Sada'a (1656N/4345E), the southern highlands near Ad Dali (1341N/4443E), and on the southern coast near Aden (1250N/4503E), Mayfa'a (1416N/4735E), and Mukalla. Adult groups were laying in Wadi Hadhramaut and on the southern coast near Zinjibar (1306N/4523E). On the Red Sea coast, scattered immature and mature solitarious adults were present mainly in the north near Suq Abs (1600N/4312E). Ground teams treated 10 718 ha.

• FORECAST

More adult groups and swarms will form in the central highlands and interior. The swarms will move to areas of recent rainfall within the interior and breed, causing another generation of hopper bands to form. Breeding is also likely to occur on the Red Sea coast.

OMAN

• SITUATION

During July, hopper groups and bands continued to form in the south on the coast and in the Dhofar Hills near Salalah (1700N/5405E). Scattered mature solitarious adults were seen west of the Dhofar Hills in the interior between Thumrait (1736N/5401E) and the edge of the Empty Quarter. In the north, scattered immature solitarious adults were present near Nizwa (2255N/5731E) and Buraimi (2415N/5547E). Ground teams treated 443 ha.

• FORECAST

Any hopper infestations that escape detection or control could form a limited number of immature groups that could move inland. If a few small immature swarms form, they could move offshore towards Indo-Pakistan.

BAHRAIN, D.R. CONGO, IRAQ, ISRAEL, JORDAN, KUWAIT, LEBANON, PALESTINE, QATAR, SYRIA, TANZANIA, TURKEY, AND UAE

• FORECAST

No significant developments are likely.

EASTERN REGION

IRAN

• SITUATION

During July, locust numbers declined further, and only small groups of hoppers and immature adults remained in South

Khorasan near Birjand (3252N/5913E) and the Afghanistan border. A few of the adults were maturing. No locusts were seen elsewhere during surveys. Ground teams treated 1 450 ha.

• FORECAST

A few small remnant populations may persist in South Khorasan. No significant developments are likely.

PAKISTAN

• SITUATION

During July, immature adult groups and swarms moved from spring breeding areas to summer breeding areas in Cholistan and Tharparkar. Consequently, only low numbers of immature mature solitary adults and a few groups remained in Baluchistan near Panjgur (2658N/6406E), Turbat (2600N/6303E), and Khuzdar (2749N/6639E), and an immature swarm was seen near Quetta (3015N/6700E) on the 19th. Low numbers of locusts were also present in the Lasbela Valley (2614N/6619E). Numerous first-generation hopper groups and bands formed in Tharparkar near Nagarparkar (2421N/7045E) and the India border in the extreme southeast of Sindh from earlier laying. Control operations treated 33 599 ha of which 400 ha were by air.

• FORECAST

Locust numbers will increase primarily in Tharparkar but also in Nara and Cholistan. First-generation hatching will continue into early August, causing hopper bands to form until about mid-September while first-generation swarms are likely to start forming at the beginning of August. A second generation of egg-laying is expected from early September onwards as above-normal rains are predicted during August. The risk of swarms arriving from the Horn of Africa will decline by mid-August. Adults groups may form in the Lasbela area that could move to Tharparkar.

INDIA

• SITUATION

During July, immature groups and swarms prevailed in the northern states of Madhya Pradesh and Uttar Pradesh but then returned west with the onset of the monsoon to Rajasthan where they joined immature swarms that were already present. The swarms quickly matured and were seen copulating mainly between Jodhpur (2618N/7308E) and Churu (2818N/7458E). Hopper groups and bands were already forming in some parts of Rajasthan from earlier breeding. In Gujarat, groups of immature and mature adults were present south of the Pakistan border in the Rann of Kutch. Ground and drone operations treated 102 645 ha of which 420 ha were by air.

• FORECAST

Locust numbers will increase in Rajasthan and northern Gujarat. Substantial first-generation hatching will continue into early August, causing numerous hopper bands to form until about mid-September while first-generation swarms are likely to start forming at the beginning of August. A second

generation of egg-laying is expected from early September onwards as above-normal rains are predicted during August. The risk of swarms arriving from the Horn of Africa will decline by mid-August.

NEPAL

• SITUATION

On 12 July, one swarm appeared near Gadhwara (2749N/8236E) in Dang district from adjacent areas of Uttar Pradesh and subsequently moved northeast in the West Rapti River Valley. Locusts were again seen on the 16th. No significant crop damage was reported.

• FORECAST

No significant developments are likely.

AFGHANISTAN

• SITUATION

During July, breeding occurred in the eastern province of Paktia where third and fourth instar hopper bands and immature gregarious adults were seen on the 14th at a few places south of Gardez (3336N/6914E) and west of Khost (3320N/6956E). Control operations treated 304 ha.

• FORECAST

Isolated adults may persist near cropping areas in Paktia. 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) periods. Countries should report at least once/month and send RAMSES data with a brief interpretation.

Caution (yellow), threat (orange) and danger (red) periods. 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 in real time.

Locust Hub

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

Calendar

No activities are currently scheduled.



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 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>

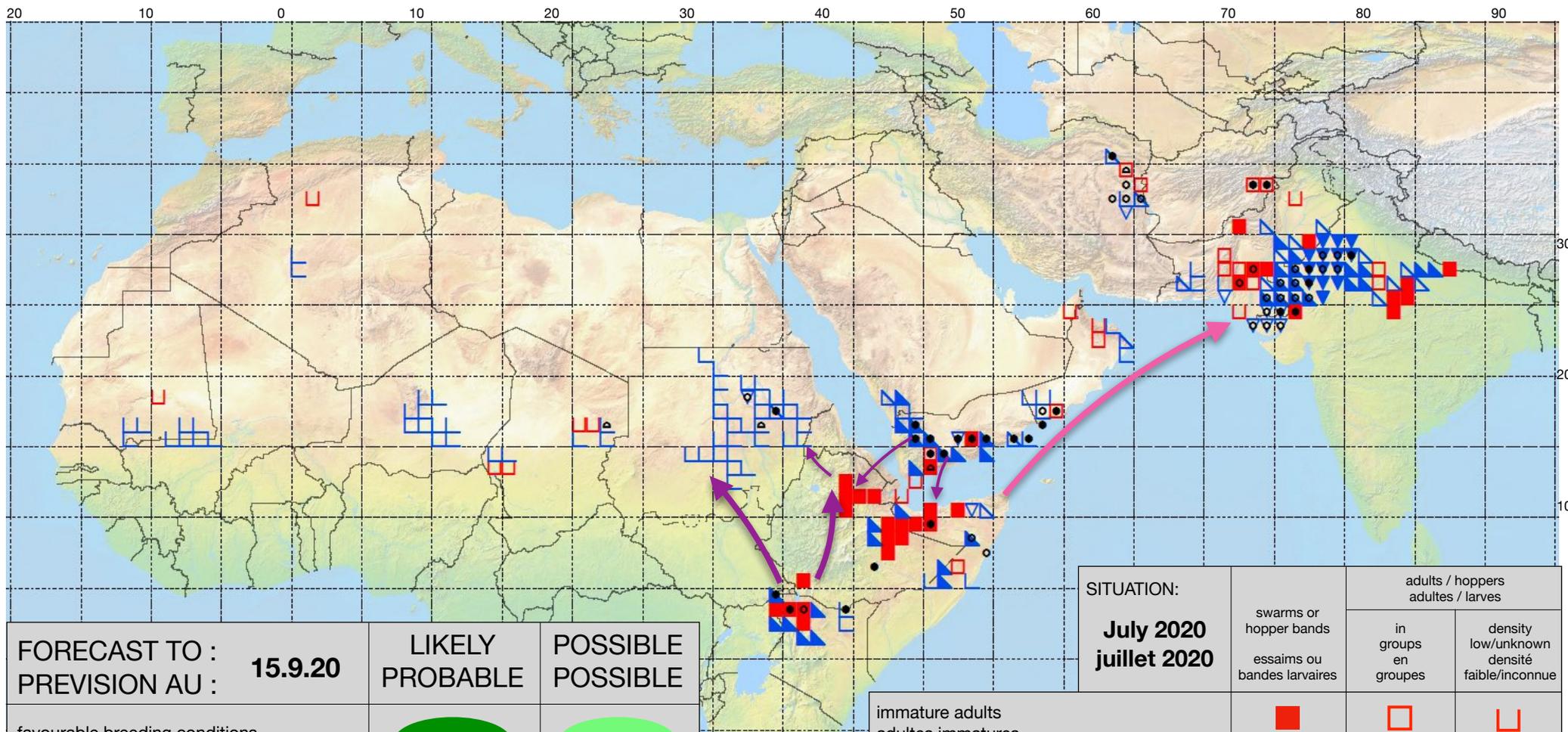
FAOLocust Slideshare. Locust presentations and photos
<http://www.slideshare.net/faolocust>

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 :	15.9.20	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: July 2020 juillet 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)			