



Desert Locust Bulletin

General situation during April 2022
Forecast until mid-June 2022

WESTERN REGION: CALM

SITUATION. No locusts present.

FORECAST. Possibility of small-scale breeding in parts of **Morocco** and **Algeria** will decline during May. Low numbers of adults may be present and persist in northern **Mali** and **Niger**. No significant developments are likely.

CENTRAL REGION: CALM

SITUATION. A few small remnant immature swarms persisted in southern **Ethiopia** (30 ha treated). Local concentrations of hoppers remained on the Red Sea coast of **Egypt** (340 ha). Isolated adults prevailed in a few places on the Gulf of Aden coast in southern **Yemen**. No locusts reported elsewhere in the region.

FORECAST. Any adults remaining in southern **Ethiopia** will move north to areas of recent rainfall in the Somali region where small-scale breeding could occur. Locusts will decline along the southern coast of **Yemen** as vegetation dries out and adults move to the interior and breed in areas that receive rainfall. Low numbers of solitary adults may appear in areas of recent rain in the interior of **Saudi Arabia** but breeding is expected to be limited as temperatures increase. No significant developments are likely.

EASTERN REGION: CALM

SITUATION. Isolated adults and hoppers in coastal areas of southeast **Iran** and southwest **Pakistan**.

FORECAST. Locusts will decline in **Iran** and **Pakistan**, and further breeding is not expected. No significant developments are likely.



CALM SITUATION WILL CONTINUE

The Desert Locust situation remained calm during April as little rain fell and dry vegetation prevailed for a third consecutive month. In the Horn of Africa, a few small remnant immature swarms remained during the first week in southern Ethiopia where they are likely to move north to eastern parts of the Somali region to mature and breed on a small scale in areas of recent rainfall. Local hopper concentrations were treated in southeast Egypt, and isolated adults persisted on the southern coast of Yemen where they could move to the interior and breed on a small scale in areas that receive rainfall. The annual joint survey covered 17 000 km in southeast Iran and southwest Pakistan and found only isolated adults and hoppers in a few coastal areas, confirming that very little breeding occurred this spring. No locusts were reported in the Western Region. The current situation will remain calm in all regions. The longer-term outlook indicates an active early monsoon season along the Indo-Pakistan border and above-normal rainfall in the northern Sahel of Africa, the Yemen interior, and northeast Ethiopia from July to September. However, it would take several generations of successful breeding before locust numbers could increase to threatening levels; hence, the situation is expected to remain calm to at least October.

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: eclo@fao.org / faodlislocust@gmail.com

Internet: www.fao.org/ag/locusts

Facebook/Twitter: [faolocust](https://www.facebook.com/faolocust)



Weather & Ecological Conditions in April 2022

Dry conditions prevailed in nearly all areas except for eastern Ethiopia and the interior of Saudi Arabia where good rains fell, and vegetation was becoming green.

WESTERN REGION

No significant rain fell and dry, unfavourable breeding conditions prevailed throughout the region during April. The only vegetation that was green was near a few irrigated areas in the central Sahara of Algeria. In West Africa, the Inter-Tropical Convergence Zone (ITCZ) continued its seasonal movement northwards but remained well south of the locust breeding areas even though its position was about 250 km further north than usual in southern Chad.

CENTRAL REGION

During April, ecological conditions were not favourable for breeding due to poor rains and dry conditions throughout the region. In the Horn of Africa, rainfall was generally limited to the Rift Valley in southern Ethiopia but light to moderate rains extended to the Somali region as well as southern and central Somalia during the second decade. There were substantial areas where vegetation was becoming green in the Somali region of eastern Ethiopia south of El Kere as well as further north between Kebri Dehar and Warder, and in southern and central Somalia as far north as Galkayo. In the interior of Saudi Arabia, light to moderate rains fell between Al Dawadimi and Gassim during the second and third decades, extending north to the Nafud Desert at times. There were small and limited areas where vegetation was becoming green between Gassim and Hail and near Wadi Dawasir. Locally heavy rains in the southern Asir Mountains caused some wadis to flood. Vegetation continued to dry out in winter breeding areas along both sides of the Red Sea and Gulf of Aden.

EASTERN REGION

No rain fell during the first decade of April in the region; however, light rains fell in the second decade in the Jaz Murian Basin of southeast Iran and from Lasbela to Khuzdar in the eastern portion of Baluchistan in southwest Pakistan. Lighter rain fell in the Kharan Valley and near Dalbandin in northern Baluchistan. Nevertheless, ecological conditions remained unusually dry due to poor spring rains and breeding conditions were not favourable.



Area Treated

Egypt 340 ha
Ethiopia 30 ha



Desert Locust Situation and Forecast

ALGERIA

• SITUATION

During April, no locusts were seen in the central Sahara between Reggane (2643N/0010E) and In Salah (2712N/0229E) and in the Adrar Valley (2753N/0017W).

• FORECAST

No significant developments are likely.

CHAD

• SITUATION

No locusts were reported during April.

• forecast

No significant developments are likely.

LIBYA

• SITUATION

No locusts were reported during April.

• FORECAST

No significant developments are likely.

MALI

• SITUATION

No locusts were reported during April.

• FORECAST

Low numbers of locusts may be present and could persist in parts of Timetrine and the Adrar des Iforas.

MAURITANIA

• SITUATION

No locusts were reported during April.

• FORECAST

No significant developments are likely.

MOROCCO

• SITUATION

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

• FORECAST

The likelihood of very small-scale and limited breeding in the Draa and Sakia El Hamra valleys as well as in the Adrar Settouf of Western Sahara will decline as May progresses.

NIGER

• SITUATION

No locusts were reported during April.

• FORECAST

Low numbers of adults may be present and could persist in parts of the Air Mountains. No significant developments are likely.

SENEGAL

• SITUATION

No locusts were reported during April.

• FORECAST

No significant developments are likely.

TUNISIA

• SITUATION

No locusts were reported during April.

• 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.

CENTRAL REGION

DJIBOUTI

• SITUATION

A late report indicated that no locusts were seen on the coast near Tadjourah (1147N/4253E) and to the west of Djibouti (113431N430847E) town during March. No locusts were reported in April.

• FORECAST

No significant developments are likely.

EGYPT

• SITUATION

During the last week of April, ground teams treated 340 ha of scattered solitarious and *transiens* fourth instar hoppers that were concentrating in the limited vegetation that remained green on the Red Sea coast near Abu Ramad (2224N/3624E). No locusts were seen elsewhere on the coast or near Lake Nasser between Abu Simbel (2219N/3138E) and Tushka (2247N/3126E).

• FORECAST

Locust numbers will decline further along the Red Sea coast and no significant developments are likely.

ERITREA

• SITUATION

No locusts were reported during April.

• FORECAST

No significant developments are likely.

ETHIOPIA

• SITUATION

During the first week of April, a few small immature swarms persisted in southern Oromia between Teltele (0504N/3723E) and the Rift Valley. Ground teams treated 30 ha on the 4th. No locusts were seen between Teltele and Mega (0403N/3819E) and in the Somali region near Jijiga (0922N/4250E).

• FORECAST

Locusts will decline in the south as a limited number of adult groups and perhaps a few small remnant swarms could appear further north in areas of recent rainfall in the eastern portion of the Somali region and breed on a small scale.

KENYA

• SITUATION

No locusts were seen or reported during April.

• FORECAST

No significant developments are likely.

OMAN

• SITUATION

During April, no locusts were seen in the northern interior between Adam (2223N/5731E) and Nizwa (2255N/5731E), near Buraimi (2415N/5547E), and on the northern coast.

• FORECAST

Isolated adults may be present in a few places of the northern interior and coast, but the likelihood of limited small-scale breeding will decline as May progresses.

SAUDI ARABIA

• SITUATION

During April, no locusts were seen during surveys carried out on the Red Sea coast near Jizan (1656N/4233E), Yenbo (2405N/3802E) and Umm Lajj (2501N/3716E), in adjacent areas of the Asir Mountains, in the northern interior near Al Jawf (2948N/3952E) and Tabuk (2823N/3635E), and in the southwest near Najran (1729N/4408E).

• FORECAST

Low numbers of adults may appear in areas of recent rainfall in the interior, but breeding is expected to be limited as temperatures increase. No significant developments are likely.

SOMALIA

• SITUATION

During April, no locusts were reported in the northwest (Somaliland), northeast (Puntland), and in central areas near Galkayo (0646N/4725E). In addition, focal points did not see locusts in areas of recent rainfall on the plateau northwest of Boroma (0956N/4313E) and near Erigavo (1040N/4720E).

• FORECAST

No significant developments are likely.

SUDAN

• SITUATION

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

• FORECAST

Isolated adults may appear near a few cropping areas in the Nile Valley between Shendi and Dongola. No significant developments are likely.

YEMEN

• SITUATION

During April, isolated immature solitary adults prevailed in a few places on the southern coast west of Aden (1250N/4503E) near Am Rija (1302N/4434E). No locusts were seen elsewhere along the Gulf of Aden coast to Mayfa'a (1416N/4735E). No surveys were carried out along the Red Sea coastal plains.

• FORECAST

Locusts will decline on the Gulf of Aden coast as low numbers of adults are likely to move to the interior and breed on a small scale in areas that receive rainfall.

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

• FORECAST

No significant developments are likely.

EASTERN REGION

AFGHANISTAN

• SITUATION

No locust reports were received in April.

• FORECAST

No significant developments are likely.

INDIA

• SITUATION

During April, no locusts were seen by surveys in Rajasthan and Gujarat.

• FORECAST

No significant developments are likely.

IRAN

• SITUATION

During April, a few isolated mature solitary adults were present on the southeast coast near Zarabad (2534N/5923E) and Chabahar (2517N/6036E). Very limited breeding occurred near Chabahar where a fourth instar solitary hopper was seen, suggesting that laying occurred locally in early March. No locusts were seen elsewhere in coastal and interior areas of the south, and in the northeast.

• FORECAST

Locust numbers will decline on the coast and no significant developments are likely.

PAKISTAN

• SITUATION

During April, a few isolated immature and mature solitary adults were present on the southwest coast near Jiwani (2502N/6150E) and in the Kolanch Valley west of Pasni (2515N/6328E). Very limited breeding occurred in both areas where a few fourth and fifth instar solitary and *transiens* hoppers and fledglings were seen, suggesting that laying occurred during the last week of February and first half of March. No locusts were seen elsewhere on the coast or in the interior.

• FORECAST

Locust numbers will decline on the coast and no significant developments are likely.



Announcements

Locust warning levels

A colour-coded scheme indicates the seriousness of the current Desert Locust situation:

- **Green** – calm situation (low alert); no threat to crops (*maintain regular monitoring*)
- **Yellow** – cautious situation (moderate alert); potential threat to crops (*increased vigilance, control may be needed*)
- **Orange** – serious situation (high alert); threat to crops (*survey and control must be undertaken*)
- **Red** – dangerous situation (very high alert); significant threat to crops (*intensive survey and control operations must be conducted*)

The scheme is applied to the Locust Watch web page and to the monthly bulletins and updates. It indicates the alert level, perceived risk, or threat of current Desert Locust infestations to crops, and appropriate response.

Locust reporting

RAMSES data. Countries should connect to the Internet and backup the RAMSES database whenever data are added or changed. There is no longer the need to send data directly to DLIS.

Bulletins. Affected countries are encouraged to prepare decadal, fortnightly, or monthly bulletins that summarize 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 day 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.

eLocust3 digital tools

In addition to the original eLocust3 tablet, FAO has three free tools for data collection in the field:

- eLocust3m – a smartphone app for regular surveys and control, developed with Plant Village (<http://tiny.cc/eL3m>)
- eLocust3g – a GPS app for emergencies, developed with Garmin (<http://tiny.cc/eLocust3g>)
- eLocust3w – an Internet form for emergencies, developed in Kobo (<http://tiny.cc/eLocust3w>)

The geo-referenced data collected by these tools feed into FAO's global early warning system and are critical for real-time monitoring and planning field operations in each country. [<http://www.fao.org/ag/locusts/en/activ/2573/eL3suite/index.html>]

Standard Operating Procedures (SOPs)

FAO has developed pocket-sized SOPs for use in the field on Desert Locust biology, survey, and control, including instructions on how to use eLocust3 tools, that are available in different languages.

[<http://www.fao.org/ag/locusts/en/publicat/gl/sops/index.html>]

Community awareness

As communities have an important role to play in Desert Locust management, FAO has developed:

- Posters – six simple, easy to understand posters, providing basic messaging on pesticide containers, safety measures, pesticide exposure, farmer advice, Desert Locust, and following instructions, which can be edited (<http://www.fao.org/ag/locusts/en/publicat/2581/index.html>)
- Animation – a simple SWABO animation for all readers that clearly explains about the dangers of Desert Locust (<https://www.youtube.com/watch?v=3TOhuA-v1m4>)

Publicly available locust data

Desert Locust survey and control data are available for research and other non-commercial purposes:

- FAO Locust Hub (<https://locust-hub-hqfao.hub.arcgis.com>)
- Hand-in-Hand (<https://data.apps.fao.org>)

Real-time evaluation report

The full report of the *2020–2021 Desert Locust upsurge real-time evaluation* is available: <https://www.fao.org/ag/locusts/en/publicat/meeting/topic/2639/2641/index.html>

2022 calendar

- **CRC.** 32nd session, Jeddah, Saudi Arabia (5–9 June)
- **DLCC.** 42nd session, Nairobi, Kenya (October or November, tbc)
- **CLCPRO.** 10th session, Algiers, Algeria (November, tbc)
- **SWAC.** Desert Locust Information Officer workshop, Tehran, Iran (5–7 December, tbc)
- **SWAC.** 33rd session, Esfahan, Iran (12–14 December, tbc)



Glossary of terms

The following special terms are used in the Desert Locust Bulletin when reporting locusts:

Non-gregarious adults and hoppers

Isolated (few)

- very few present and no mutual reaction occurring
- 0–1 adult/400 m foot transect (or less than 25/ha)

Scattered (some, low numbers)

- enough present for mutual reaction to be possible but no ground or basking groups seen
- 1–20 adults/400 m foot transect (or 25–500/ha)

Group

- forming ground or basking groups
- 20+ adults/400 m foot transect (or 500+/ha)

Adult swarm and hopper band sizes

Very small

- 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*. Low alert. No threat to crops; maintain regular surveys and monitoring

Yellow

- *Caution*. Moderate alert. Potential threat to crops; increased vigilance is required; control operations may be needed

Orange

- *Serious*. High alert. Threat to crops; survey and control operations must be undertaken

Red

- *Danger*. Very high alert. 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 upsurges and 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 upsurges and plagues only: Bahrain, D.R. Congo, 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>

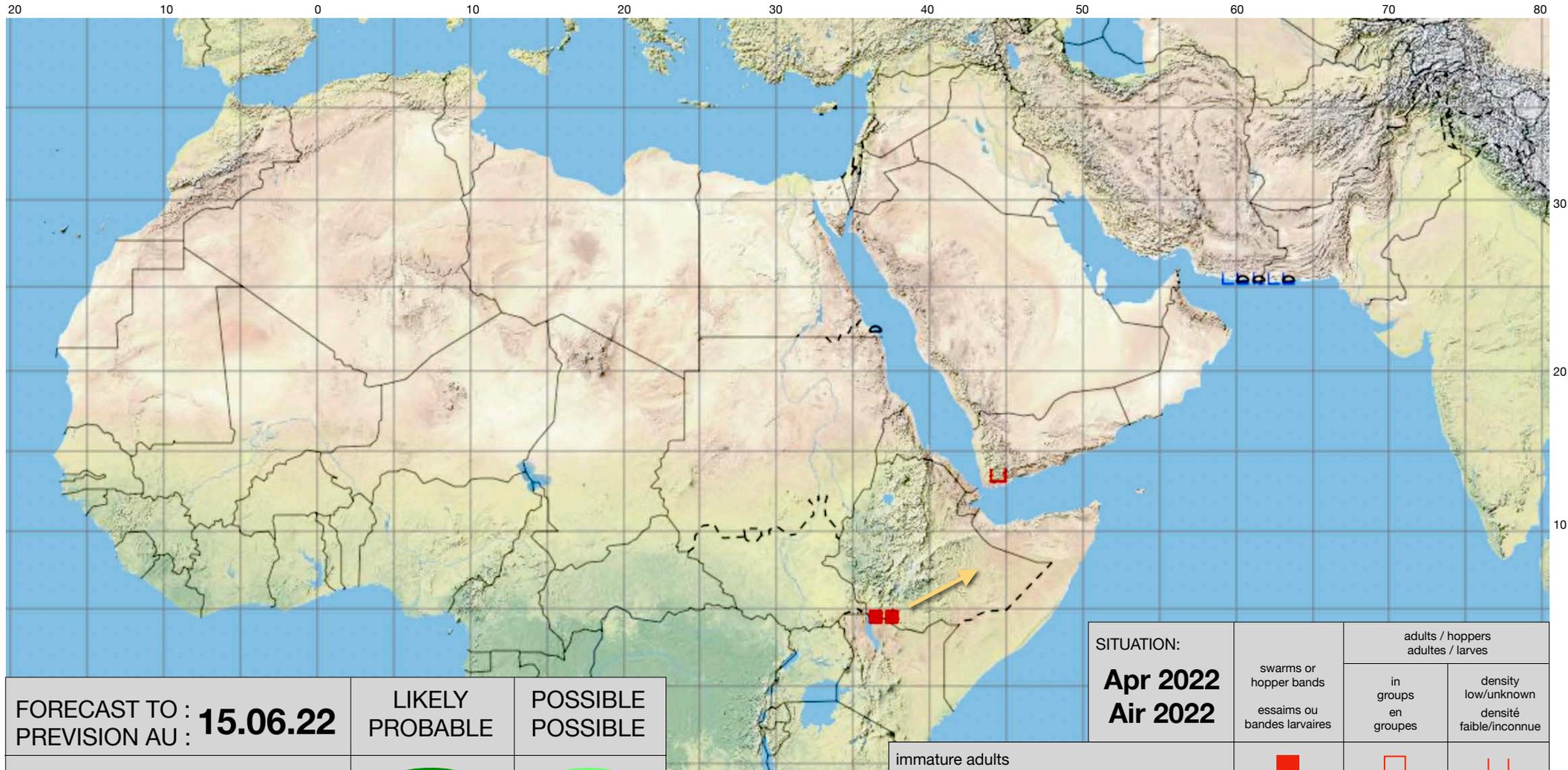
eLERT. Online database of resources and technical specifications for locust emergencies
<http://sites.google.com/site/elertsite>



Desert Locust Summary

Criquet pèlerin – Situation résumée

523 



FORECAST TO : PREVISION AU :	LIKELY PROBABLE	POSSIBLE POSSIBLE
15.06.22		
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 2022 Air 2022	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)			