





## Weather & Ecological Conditions in May 2022

No significant rain fell, vegetation was mainly dry and breeding conditions were unfavourable in all areas.

### WESTERN REGION

No significant rain fell and unfavourable breeding conditions prevailed throughout the region during May. The only vegetation that was green was in Algeria near a few irrigated areas in the Adrar Valley and in Wadi Amded to the west of Tamanrasset in the south. In West Africa, the Inter-Tropical Convergence Zone (ITCZ) continued its seasonal movement northwards but remained well south of the locust breeding areas and its historical position between Mauritania and Niger. In Chad, the ITCZ reached Ati (Batha) by 20 May, which was about 100 km further north than usual. High temperatures were reported throughout the Sahel.

### CENTRAL REGION

During May, ecological conditions continued to be unfavourable for breeding due to poor rains and dry conditions throughout the region. The only rain that was reported was in parts of Ethiopia where light rains fell in a few places of East Harerghe zone in the Somali region south of Jijiga and in southern Oromia. Annual vegetation was becoming green in the Somali region east and south of Jijiga to the Somalia border, extending to Las Anod in northeast Somalia. In Sudan, the Inter-Tropical Convergence Zone (ITCZ) continued its seasonal movement northwards and reached Zalingei in South Darfur and En Nahud in South Kordofan by 20 May, which was up to 175 km further north than usual. In Saudi Arabia, temperatures increased in the interior, and vegetation was green on the southern Red Sea coast close to Jizan and near irrigated areas in the northern interior of Al Jawf. In Yemen, limited areas were green from runoff along the eastern side of the highlands east of Sana'a and near Bayhan as well as in the Hadhramaut Valley.

### EASTERN REGION

No significant rain fell and unfavourable breeding conditions prevailed throughout the region during May.



## Area Treated

Egypt 2 275 ha



## Desert Locust Situation and Forecast

### WESTERN REGION

#### ALGERIA

##### • SITUATION

During May, no locusts were seen in the central Sahara along the Adrar Valley (2753N/0017W) and in the southern Sahara to the west of Tamanrasset (2250N/0528E) in Wadi Amded.

##### • FORECAST

*No significant developments are likely.*

#### CHAD

##### • SITUATION

No locusts were reported during May.

##### • forecast

*Low numbers of solitary adults are likely to appear in the northern Sahel during July when summer rains are expected to commence, which will be followed by small-scale breeding.*

#### LIBYA

##### • SITUATION

No locusts were reported during May.

##### • FORECAST

*No significant developments are likely.*

#### MALI

##### • SITUATION

No locusts were reported during May.

##### • FORECAST

*Low numbers of locusts may be present in parts of Timetrine and the Adrar des Iforas where small-scale breeding is expected once summer rains commence during July.*

#### MAURITANIA

##### • SITUATION

No locusts were reported during May.

##### • FORECAST

*Low numbers of solitary adults are likely to appear in the southeast during July when summer rains are expected to commence, which will be followed by small-scale breeding.*

#### MOROCCO

##### • SITUATION

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

##### • FORECAST

*No significant developments are likely.*

#### NIGER

##### • SITUATION

No locusts were reported during May.

• FORECAST

*Low numbers of solitary adults are likely to appear in central pasture areas and on the Tamesna Plains during July when summer rains are expected to commence, which will be followed by small-scale breeding.*

## SENEGAL

• SITUATION

No locusts were reported during May.

• FORECAST

*No significant developments are likely.*

## TUNISIA

• SITUATION

No locusts were reported during May.

• 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

No locusts were reported during May.

• FORECAST

*No significant developments are likely.*

### EGYPT

• SITUATION

During May, fifth and sixth instar hoppers and immature adults concentrated in the little vegetation that remained green and formed a few small groups along Wadi Garara (2352N/3359E) and nearby wadis in the Red Sea Hills to the west of El Sheikh El Shazly (2412N/3438E). Immature adults also formed a few small groups on the coast in the southeast near Abu Ramad (2224N/3624E) while scattered adults were present near Abraç (2323N/3451E). Ground teams treated 2 275 ha during May. No locusts were seen near farms in the Sh. Oweinat (2219N/2845E) area of the southern interior.

• FORECAST

*Scattered adults and perhaps a few small groups may persist in the southeast, but they will decline and no significant developments are likely.*

### ERITREA

• SITUATION

No locusts were reported during May.

• FORECAST

*Low numbers of solitary adults are likely to appear in the western lowlands during July when summer rains are expected to commence, which will be followed by small-scale breeding.*

## ETHIOPIA

• SITUATION

During May, no locusts were seen by surveys conducted in the Somali region between Dire Dawa (0935N/4150E) and Ayasha (1045N/4234E), from Jijiga (0922N/4250E) to Degeh Bur (0813N/4333E), and in the east near Warder (0658N/4520E). In southern Oromia, no locusts were present near Teltele (0504N/3723E).

• FORECAST

*There is a low possibility that small-scale breeding could occur in areas of recent rainfall in the eastern portion of the Somali region. During July, low numbers of adults may appear in Afar where small-scale breeding could occur once rains fall. No significant developments are likely.*

## KENYA

• SITUATION

No locusts were seen or reported during May.

• FORECAST

*No significant developments are likely.*

## OMAN

• SITUATION

During May, no locusts were seen in the northern interior between Adam (2223N/5731E) and Nizwa (2255N/5731E), near Buraimi (2415N/5547E), on the northern coast, and in the south near Thumrait (1736N/5401E).

• FORECAST

*No significant developments are likely.*

## SAUDI ARABIA

• SITUATION

During the first week of May, no locusts were seen by surveys on the Red Sea coast from Jizan (1656N/4233E) to Duba (2719N/3546E), in adjacent areas of the Hijaz and Asir Mountains, the southwest interior near Najran (1729N/4408E) and the Yemen border, and in the northern interior between Al Jawf (2948N/3952E), Tabuk (2823N/3635E), and the Jordan border.

• FORECAST

*No significant developments are likely.*

## SOMALIA

• SITUATION

During May, no locusts were seen by surveys in the northwest (Somaliland), northeast (Puntland), and central areas near Galkayo (0646N/4725E). In addition, no locusts were seen along the Shebelle River north of Mogadishu (0202N/4520E).

• FORECAST

*Isolated adults may be present in the northeast between Las Anod and the Ethiopia border. No significant developments are likely.*

## SUDAN

### • SITUATION

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

### • FORECAST

*A few small groups from the northeast could arrive in the northern Nile Valley between Dongola and Shendi. Low numbers of solitary adults are likely to appear between North Darfur and Kassala states during July when summer rains are expected to commence.*

## YEMEN

### • SITUATION

During May, no locusts were seen during surveys in the interior near Al Hazm (1610N/4446E), Marib (1527N/4519E), Bayhan (1452N/4545E), and Ataq (1435N/4649E), the Hadhramaut Valley, the plateau from Thamud (1717N/4955E) to the Oman border, and in the east between Shehan (1746N/5229E) and Al Ghaydah (1612N/5210E).

### • FORECAST

*Small-scale breeding may occur in interior areas that receive rainfall at the end of the forecast period.*

## 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 May.

#### • FORECAST

*No significant developments are likely.*

### INDIA

#### • SITUATION

No locusts were seen by surveys in Rajasthan and Gujarat during May.

#### • FORECAST

*Low numbers of solitary adults may appear in parts of eastern Rajasthan during July when summer monsoon rains are expected to commence.*

### IRAN

#### • SITUATION

No locusts were seen by surveys in southern coastal areas and in the northeast during May.

#### • FORECAST

*No significant developments are likely.*

## PAKISTAN

### • SITUATION

During May, a few isolated solitary adults were maturing on the southwest coast near Jiwani (2502N/6150E) and Pasni (2515N/6328E). No locusts were seen elsewhere on the coast or in the interior.

### • FORECAST

*Low numbers of solitary adults may appear in parts of Tharparkar, Nara and Cholistan during July when summer monsoon rains are expected to commence.*



## Announcements

### Locust warning levels

A colour-coded scheme indicates the alert level, perceived risk, or threat of current Desert Locust infestations to crops, and appropriate response:

- **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.

### Locust reporting

**RAMSES data.** Countries should connect to the Internet and backup the RAMSES database whenever data are added or changed; do not wait until the end of the month.

**Bulletins.** Affected countries are encouraged to prepare decadal, fortnightly, or monthly bulletins that summarize and analyze 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](mailto:eclo@fao.org) and [faodlislocust@gmail.com](mailto: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 survey and control data, developed with PlantVillage (download: <http://tiny.cc/eL3m>; how-to-use videos: <http://tiny.cc/eL3mVideos>)

- 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, near instant analysis, 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>)
- FAO 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: <http://tiny.cc/RTE2022>

## 2022 calendar

- **CRC.** 32<sup>nd</sup> session, Jeddah, Saudi Arabia (5–9 June)
- **DLCC.** 42<sup>nd</sup> session, Nairobi, Kenya (October/November, tbc)
- **CLCPRO.** 10<sup>th</sup> session, Algiers, Algeria (November, tbc)
- **SWAC.** Desert Locust Information Officer workshop, Tehran, Iran (5–7 December, tbc)
- **SWAC.** 33<sup>rd</sup> session, Esfahan, Iran (11–13 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 km<sup>2</sup>
- band: 1–25 m<sup>2</sup>

#### Small

- swarm: 1–10 km<sup>2</sup>
- band: 25–2,500 m<sup>2</sup>

#### Medium

- swarm: 10–100 km<sup>2</sup>
- band: 2,500 m<sup>2</sup> – 10 ha

#### Large

- swarm: 100–500 km<sup>2</sup>
- band: 10–50 ha

#### Very large

- swarm: 500+ km<sup>2</sup>
- 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](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](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>

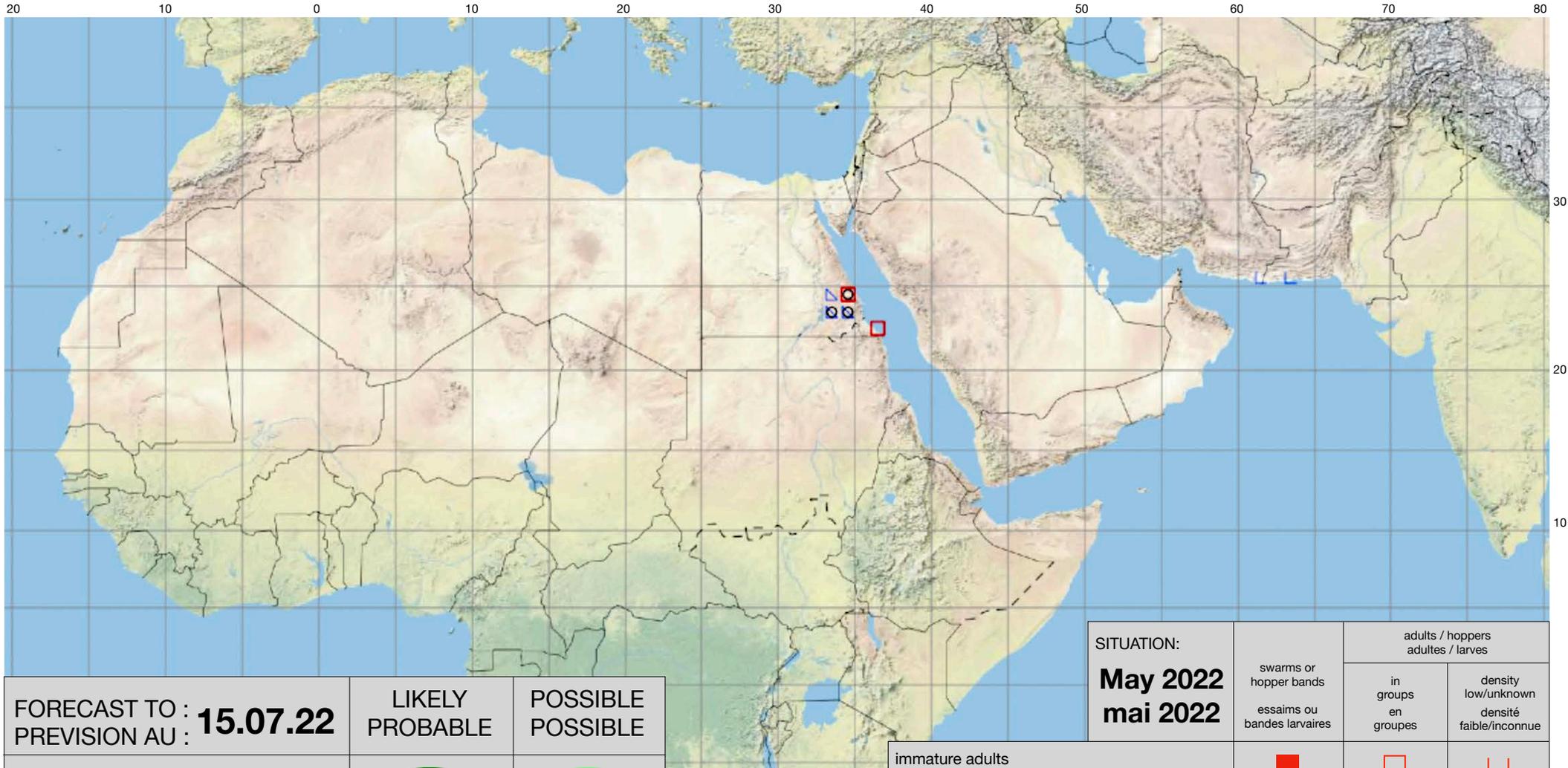
**FAOLocust Slideshare.** Locust presentations and photos  
<http://www.slideshare.net/faolocust>

**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 :	LIKELY PROBABLE	POSSIBLE POSSIBLE
<b>15.07.22</b>		
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: <b>May 2022</b> <b>mai 2022</b>	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)			