



Desert Locust Bulletin

General situation during September 2021
Forecast until mid-November 2021

WESTERN REGION: CALM

SITUATION. Scattered hoppers and adults from local breeding in **Mali** and **Chad**.

FORECAST. No significant developments.

CENTRAL REGION: THREAT

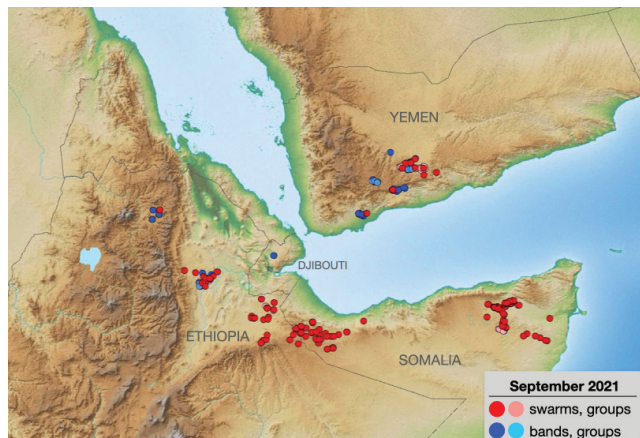
SITUATION. Control operations continue in northern **Somalia** (9 972 ha treated) and started in eastern **Ethiopia** (3 657 ha) against a few remaining small spring-bred immature swarms; hopper bands and new immature swarms form in the northeast (Afar) and north (Tigray, Amhara) of Ethiopia where survey and control were limited due to access and insecurity; hopper bands form in **Djibouti**. Hopper bands and swarms form in **Yemen** interior (417 ha) where control limited by beekeepers. Small-scale breeding in **Sudan** (1 400 ha) with a few hopper and adult groups. Isolated adults in **Egypt**.

FORECAST. More immature swarms will form in northeast and northern **Ethiopia** and move to the **Eritrea** Red Sea coast and eastern Ethiopia, including adjacent areas of northern **Somalia**. Maturation and breeding will occur with the onset of the rains in both destinations. A few small swarms may also form in **Djibouti** and move to Somalia. More small swarms will form in the **Yemen** interior, some of which could move to the Gulf of Aden coast and Red Sea coast of Yemen and **Saudi Arabia** for winter breeding while others may cross to northern Somalia. A few small groups may form in **Sudan** and move to the Red Sea coast for winter breeding.

EASTERN REGION: CALM

SITUATION. No locusts present.

FORECAST. No significant developments.



New swarms form in NE Ethiopia

The locust situation remains serious in the Horn of Africa and Yemen. As anticipated, new immature swarms began to form after mid-September in the summer breeding areas of northeast Ethiopia and most likely in adjacent areas of the northern highlands where hopper bands were reported. The scale of the breeding is not well known, and control operations could not be conducted due to insecurity. Although limited field operations began to resume in some areas by the end of the month, more small immature swarms will form in Afar, Tigray, and Amhara regions of Ethiopia during October. As vegetation dries out, they will migrate north through the highlands to Eritrea and the Red Sea coast as well as east perhaps through Djibouti at times to eastern Ethiopia and northern Somalia. October rains that are expected in the Somali region of eastern Ethiopia and adjacent plateau and coastal areas of northern Somalia will allow the summer-bred swarms and the remaining spring-bred swarms to mature and lay eggs, giving rise to hatching and hopper band formation from about early November onwards. Similarly, any swarms that reach the Red Sea coast of Eritrea from northern Ethiopia are likely to mature and breed once winter rains commence. Although limited control operations were carried out in the interior of Yemen, more small swarms are expected to form and move to coastal areas along the Red Sea and Gulf of Aden for eventual breeding. A few swarms may cross to northern Somalia while any swarms that reach the Red Sea coast of Yemen could continue to adjacent coastal areas of southwest Saudi Arabia. Elsewhere, the situation is calm.

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 September 2021

Seasonal rains came to an end in most summer breeding areas and vegetation was starting to dry out.

WESTERN REGION

In the Sahel of West Africa, the Inter-Tropical Convergence Zone (ITCZ) began its seasonal retreat southwards during the first decade of the month, moving further south than normal over Mauritania, Mali, and Niger. However, it remained more than 100 km further north than usual over Mauritania during the second decade. As a result, showers were lighter and less frequent in northern parts of the Sahel compared to August. Rains declined in all breeding areas of the northern Sahel after the first week. Consequently, vegetation began to dry out in some areas at the end of the month, for example, in southern Mauritania and western Chad, but remained green in central and eastern areas of Chad. Light rain fell at times during the second decade in west and northwest Mauritania, extending into southern areas of the Western Sahara. In northwest Africa, dry conditions prevailed.

CENTRAL REGION

In the Horn of Africa, light to moderate rain continued to fall in central and southern areas of Afar region in northeast Ethiopia and adjacent areas in Djibouti during the first decade. Thereafter, rainfall declined in all areas. Good rains fell in the Harar Highlands of eastern Ethiopia while heavier rains fell in the northern highlands. Sporadic showers occurred during the second decade along parts of the plateau in northern Somalia. In Sudan, the Inter-Tropical Convergence Zone (ITCZ) was more than 150 km further north during the first decade of September, hovering over the Bayuda Desert. Thereafter, it began its seasonal retreat southwards to Khartoum in the second decade. Consequently, light to moderate showers fell between Khartoum and Berber during the first decade with light rains at times in North Darfur, North Kordofan and in the east between the Nile Valley and the Red Sea Hills, extending to the western lowlands in Eritrea. Rainfall declined during the second decade in all areas and only light rains fell near Kassala and in western Eritrea. Nevertheless, vegetation remained green in most places except near Kassala where it was starting to dry out. In Yemen, very little rain fell in the interior, but vegetation remained green in southern parts near Ataq. In the winter breeding areas, light to moderate rains fell along the Red Sea coast of Yemen and, to a lesser extent, on the Gulf of Aden coast in the southwest during the first decade. Light rains continued during the second decade on the Red Sea coast in Yemen and extended to the Jizan coast in Saudi Arabia. Dry conditions prevailed in northern Oman.

EASTERN REGION

Light to moderate rains fell during the second week of September in Rajasthan of India, and adjacent areas of Tharparkar in Pakistan. Heavier rains fell further south in Gujarat, which had very little impact on the breeding areas to the north. During the remainder of the month, very little rain fell except for some sporadic showers during the last decade in Rajasthan. The seasonal withdrawal of the monsoon from Rajasthan which normally occurs about mid-September was delayed this year by at least two weeks because of Cyclone Gulab to the south. Consequently, rainfall this year in Rajasthan was higher than normal, allowing vegetation to remain green in most areas to the end of the month.



Area Treated

There was a slight increase in control operations during September to 15 446 ha compared to 12 165 ha in August.

Ethiopia	3 657 ha
Somalia	9 972 ha
Sudan	1 400 ha
Yemen	417 ha



Desert Locust Situation and Forecast

WESTERN REGION

ALGERIA

• SITUATION

During September, no locusts were seen in the Adrar Valley (2753N/0017W) of the central Sahara.

• FORECAST

No significant developments are likely.

CHAD

• SITUATION

During September, isolated second to sixth instar solitarious hoppers were present near Ziguey (1443N/1547E) in Kanem and near Kalait (1550N/2054E) and Fada (1714N/2132E) in the northeast. Isolated solitarious adults were maturing in these areas as well as in the Beurkia area (ca. 1524N/1800E) in southern Borkou and in parts of Biltine in the east.

• forecast

Isolated adults are likely to persist in areas that remain green between Kanem and Fada.

LIBYA

• SITUATION

No locusts were reported during September.

• FORECAST

No significant developments are likely.

MALI

• SITUATION

During September, small-scale breeding was detected in the Adrar des Iforas of the northeast where scattered solitary hoppers of all instars and isolated immature and mature solitary adults were seen near Aguelhoc (1927N/0052E).

• FORECAST

Low numbers of locusts are likely to persist in parts of Timetrine and the Adrar des Iforas.

MAURITANIA

• SITUATION

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

• FORECAST

Low numbers of locusts maybe present and could persist in areas of recent rainfall in Inchiri and western Trarza.

MOROCCO

• SITUATION

No locusts were reported during September.

• FORECAST

No significant developments are likely.

NIGER

• SITUATION

No locust surveys were carried out and no locusts were reported during September.

• FORECAST

Although small-scale breeding probably occurred in parts of the Tamesna Plains, only low numbers of adults are likely to persist in areas that remain green; thereafter, they may move into the Air Mountains.

SENEGAL

• SITUATION

No reports were received in September.

• FORECAST

No significant developments are likely.

TUNISIA

• SITUATION

No locusts were reported during September.

• 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

On 7 September, two fifth instar hopper bands were seen in the northern interior near Dorra (1209N/4228E) in Tadjourah region.

• FORECAST

Small immature groups and swarms are expected to form in a few western and southern areas during October and move towards Somalia. A few small swarms from northeast Ethiopia may also transit through the country towards northwest Somalia.

EGYPT

• SITUATION

During September, isolated immature solitary adults were seen at the end of the month in the south near Lake Nasser and Tushka (2247N/3126E). No locusts were seen on the Red Sea coast in the southeast.

• FORECAST

No significant developments are likely.

ERITREA

• SITUATION

No locusts were seen during surveys in the western lowlands near Teseney (1506N/3639E) on 26–28 September.

• FORECAST

A low to moderate number of small immature swarms are likely to appear in the highlands from northern Ethiopia and move to the Red Sea coast for eventual maturation and egg-laying.

ETHIOPIA

• SITUATION

During September, there was an isolated report of second instar hopper bands during the first week in central Afar between Semera (1148N/4100E) and Chifra (1136N/4001E), followed by third to fifth instar bands after mid-month and the formation of new immature swarms, starting on the 20th. In Tigray, first instar hopper bands were seen in the first week south of Mekele (1329N/3928E) from earlier swarm breeding in July that affected at least seven woredas in the southeast. By the end of the month, new immature swarms were forming. A similar situation was reported in adjacent areas of Amhara (Wag Hemra) and Afar. Although communities and local experts were doing some limited control operations, most breeding areas were not accessible in Afar, Amhara, and Tigray. In the Somali region, an

increasing number of small immature swarms was seen after mid-month between Dire Dawa (0935N/4150E), Ayasha (1045N/4234E), and Jijiga (0922N/4250E) that were probably a mixture of remnant spring-bred swarms from adjacent areas of northwest Somalia and newly formed summer-bred swarms in Afar. Control operations treated 3 657 ha of which 3 102 ha were by air.

• FORECAST

An increasing number of immature swarms are expected to form in Afar, eastern Amhara and southeast Tigray regions from where they will migrate north to Eritrea and east to the eastern parts of the Somali region and adjacent areas of northern Somalia. Once rain falls in the Somali region, the swarms will mature and lay eggs that will start to hatch towards the end of the forecast period.

KENYA

• SITUATION

During September, surveys continued in northern and central counties, and no locusts were reported.

• FORECAST

No significant developments are likely.

OMAN

• SITUATION

During September, no locusts were seen in the northern interior between Adam (2223N/5731E) and Buraimi (2415N/5547E), on the Musandam Peninsula, and along the Batinah coast.

• FORECAST

No significant developments are likely.

SAUDI ARABIA

• SITUATION

During September, no locusts were seen in the southwest close to the Yemen border on the Red Sea coast near Jizan (1656N/4233E) and in the interior near Najran (1729N/4408E).

• FORECAST

Low numbers of locusts could appear along the southern coastal plains near Jizan and breed on a small scale in areas that receive rainfall. This may be supplemented by a few swarms arriving from adjacent areas of Yemen.

SOMALIA

• SITUATION

During September, a limited number of small spring-bred swarms persisted on the plateau where they remained immature. As the month progressed, they become more active with increased sightings in the northwest (Somaliland) between Boroma (0956N/4313E) and Hargeisa (0931N/4402E) and in the northeast (Puntland) between Erigavo (1040N/4720E) and Iskushuban (1017N/5014E). Limited cross-border movements occurred west of Hargeisa. By the end of the month, a few swarms were starting to

mature in the northeast. Scattered maturing adults were seen on the northwest coast near Silil (1058N/4326E). Control operations treated 9 972 ha of which 4 181 ha were by air.

• FORECAST

Low numbers of small swarms will persist on the plateau in the northwest and northeast with some cross border movements in the northwest. October rains should allow the swarms to mature and lay eggs on the plateau and perhaps on the northwest coast. This will cause hatching and band formation during November. Additional immature swarms are expected to arrive from northeast Ethiopia and perhaps a few from southern Yemen.

SUDAN

• SITUATION

During September, small-scale breeding occurred in North Kordofan where second to fifth instar solitarious hoppers were present between El Obeid (1311N/3010E) and Abu Uruq (1554N/3027E) in the first week. Breeding also took place in the Bayuda Desert where small groups of late instar hoppers and immature adults formed during the second half of the month. Scattered immature and mature solitarious adults were present in both areas as well as in the east near Kassala (1527N/3623E). Scattered mature solitarious adults were also seen in the northern Nile Valley near Ed Debba (1803N/3057E), Dongola (1910N/3027E), and Wadi Halfa (2147N/3122E). Ground teams treated 1 400 ha.

• FORECAST

A few more small groups of hoppers and adults are likely to form in the Bayuda Desert and perhaps in parts of North Kordofan as vegetation dries out. Locusts may appear between the Nile Valley and the Red Sea Hills as adults move from the summer breeding areas to the Red Sea coast for winter breeding. There is low risk that a few small immature swarms from northern Ethiopia may arrive along the southern coastal plains.

YEMEN

• SITUATION

During September, hopper groups and bands continued to be present in the interior between Bayhan (1452N/4545E) and Ataq (1435N/4649E), in the southern highlands near Al Baydha (1405N/4542E), and on the southern coast north of Lahij (1303N/4453E). Fledging commenced in these areas during the first week, giving rise to groups and several swarms of immature adults. Adults from earlier breeding matured and formed groups and at least one swarm near Ataq. The situation remains unclear in other areas of the interior due to insecurity and a lack of surveys. Control operations were limited by the presence of beekeepers, treating 417 ha.

• FORECAST

More adult groups and small swarms are expected to form from breeding in the interior. As vegetation dries out, the

swarms are likely to move into the highlands and to the coastal plains along the Gulf of Aden and the Red Sea where they will mature and breed once rainfall occurs.

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 during September.

• FORECAST

No significant developments are likely.

INDIA

• SITUATION

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

• FORECAST

No significant developments are likely.

IRAN

• SITUATION

During September, no locusts were seen or reported in coastal and interior areas of the south, and in the northeast.

• FORECAST

No significant developments are likely.

PAKISTAN

• SITUATION

During September, no locusts were seen or reported in the summer breeding areas in Tharparkar, Nara and Cholistan deserts as well as west of Karachi in the Lasbela (2614N/6619E) area.

• FORECAST

No significant developments are likely.



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 2020, 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.

[\[www.fao.org/locusts\]](http://www.fao.org/locusts)

eLocust3 tools

In addition to the original eLocust3 tablet, FAO has developed three new free tools – a mobile app (eLocust3m), a GPS app (eLocust3g), and an Internet form (eLocust3w) – for improving survey and control reporting by field teams and communities. The data are critical for monitoring the situation and organizing control operations in each country, and feeds into FAO's global early warning system in near real time.

[\[http://www.fao.org/ag/locusts/en/activ/2573/eL3suite/index.html\]](http://www.fao.org/ag/locusts/en/activ/2573/eL3suite/index.html)

eLocust3mPRO

The eLocust3m mobile app now includes a PRO module to be used by well-trained locust teams for entering complete data on ecology, weather, locust, control, and safety. Teams that return to network coverage at the end of the day can use eLocust3mPRO while those teams that remain for several days in areas without coverage should continue to use the original eLocust3 tablet that sends data via satellite. The updated eLocust3m app is available for Android smartphones on the Google Play Store.

[\[https://play.google.com/store/apps/details?id=plantvillage.locustsurvey&hl=en&gl=US\]](https://play.google.com/store/apps/details?id=plantvillage.locustsurvey&hl=en&gl=US)

Desert Locust Standard Operating Procedures (SOPs)

A new SOP on Biology as well as an updated Ground Survey SOP, including instructions on how to use eLocust3, eLocust3g and eLocust3m, are available on Locust Watch.

Amharic and Somali versions are available for Biology, Survey, and Control. The SOPs are pocket-sized and meant to be used in the field.

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

Desert Locust posters

FAO in collaboration with OCHA has developed six simple, easy to understand posters for communities that may be affected by locusts. The purpose is to provide basic messaging on pesticide containers, safety measures, pesticide exposure, farmer advice, Desert Locust, and following instructions. The posters can be edited.

[<http://www.fao.org/ag/locusts/en/publicat/2581/index.html>]

Desert Locust animation

FAO in collaboration with SWABO has produced a simple animation that explains the danger of Desert Locust.

[<https://www.youtube.com/watch?v=3TOhuA-v1m4>]

Locust Hub

FAO in partnership with ESRI operates 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>]

Hand-in-Hand geospatial platform

FAO has developed the Hand-in-Hand geospatial platform that also integrates Desert Locust data from the Locust Hub.

[<https://data.apps.fao.org>]

Calendar

- **CRC.** 32nd session, Jeddah, Saudi Arabia (14–18 November)
- **DLCC.** 42nd session, Nairobi, Kenya (8–11 March 2022, tbc)
- **CLCPRO.** 10th session, Algiers, Algeria (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.* 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 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>

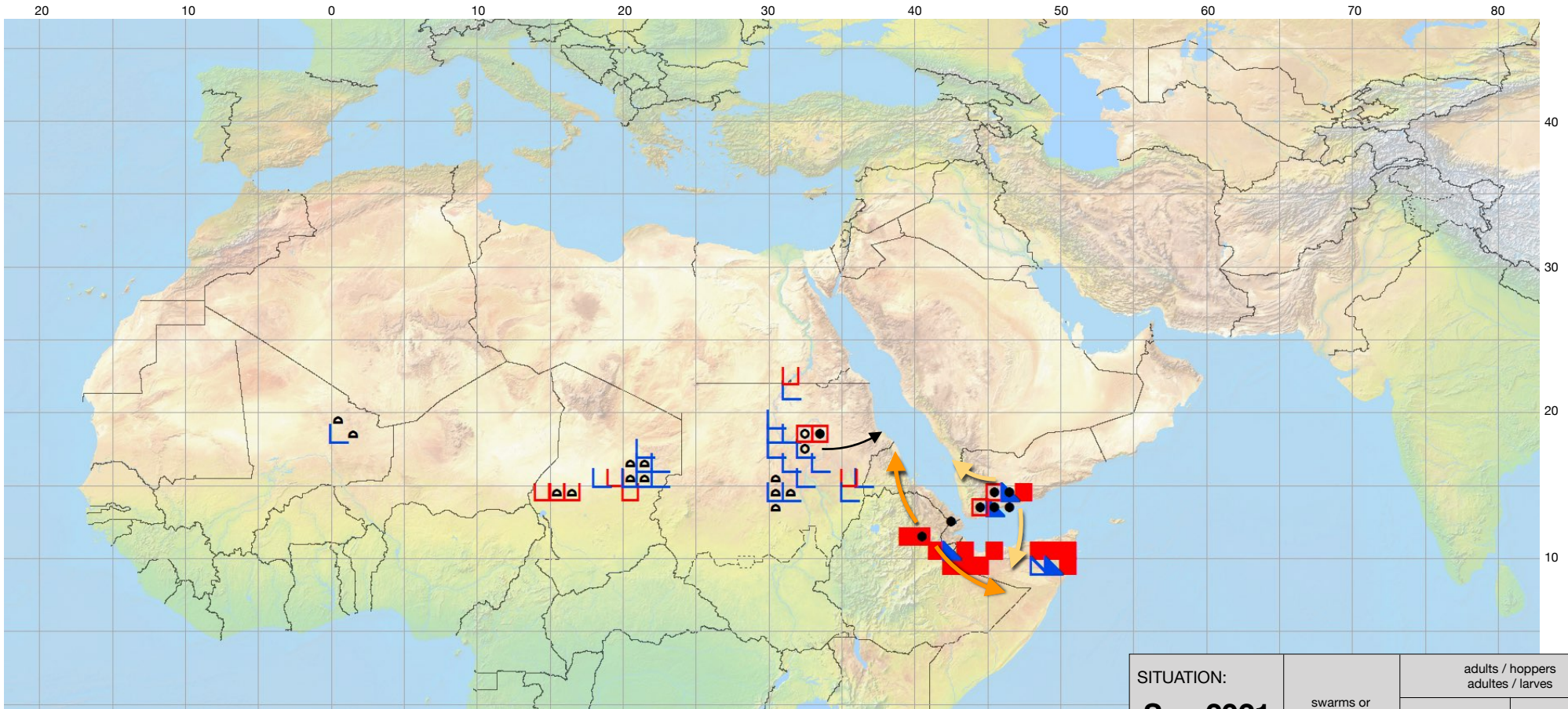
eLERT. Online database of resources and technical specifications for locust emergencies
<http://sites.google.com/site/elertsite>




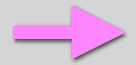


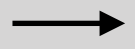


















Desert Locust Summary

Criquet pèlerin – Situation résumée

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FORECAST TO : PREVISION AU :	LIKELY PROBABLE	POSSIBLE POSSIBLE
15.11.21		
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: Sep 2021 sep 2021	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)	