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Locusts, other migratory pests and emergency operations group

DESERT LOCUST SITUATION SUMMARY AND FORECAST

No. 108

AUGUST - EARLY SEPTEMBER 1987

SUMMARY

Gregarious second summer generation breeding has occurred in Niger, Chad, Sudan and Ethiopia and second generation adults have appeared in Chad. Control operations have been mounted in many areas and widespread swarm formation has probably been checked but the situation in Chad and northern Ethiopia still gives cause for concern.

There has been gregarious breeding in Yemen PDR and small scale breeding in India and Saudi Arabia.

For technical reasons the map which should accompany this summary will be sent with Summary No. 109.

WEST AFRICA

Meteorology

During the first decade of August the Intertropical Convergence Zone (FIT) oscillated between 17 and 20 degrees north over Niger, Mali and westwards to central Mauritania, while in the second and third decades its mean position was 20 degrees north. As a result of its more northerly position there were good rains in many areas, although the cumulative rainfall was below average. In Mauritania rainfall was deficient in the first two decades; nevertheless Aleg reported 37 mm in one day and Atar reported 15 mm on 14 August. In the third decade there were widespread good rains, Akjoujt, Aleg, Kiffa and Tidjikja all recording more than 10 mm. In Mali there were good rains in the Bouressa basin in northern Adrar des Iforas and in the Tilemsi valley, where a lake 80 km long was present in early September. In Niger there were good rains in northern and eastern Aïr and Tamesna at 18° N. In Chad there were good rains during the first half of August but in the second half of the month the FIT withdraw to about 15° N and the harmattan became established.

In the first decade of September the FIT withdraw southwards to around 15° N to the west of Chad and no significant rain has been reported.

Breeding conditions

A helicopter survey on 31 August - 1 September found that breeding conditions were extremely favourable in eastern Chad between 1345 N and 1500 N and 1918 E and 2215 E. They were also favourable in many wadis in Aïr and in parts of Tamesna in Niger and also in parts of the Adrar des Iforas and in the Tilemsi valley in Mali. Conditions will have become locally favourable for breeding in central and southern Mauritania.

Locusts

NIGER

In eastern Aïr an aircraft treated 19,600 hectares of hopper bands, young swarms and, later, mature and copulating adults up to 21 August, using 1800 litres of Dieldrin 20%, 3000 litres of Fenitrothion 1000 and 200 litres of Fenitrothion 50%. On 5 August a ground survey found a mature copulating and laying swarm covering 120 hectares at densities of 2-5 per sq. metre at Wadi Zalilat (1835N/0855E), a fledgling swarmlet of 10 hectares at Wadi Tchighazerine (1825N/0905E) and another of 1 hectare at Wadi Baouet (1810N/0905E).

On the route Agades to Tahoua solitarigest adults were seen at a density of 20 per hectare over 1000 hectares 100 km south of Agades. On 18 August a copulating swarmlet of 10 hectares was sprayed in Wadi Zalilat (1832N/0838E) and a copulating swarm of 50 hectares was sprayed at (1829N/0901E). In the Adrar Chiriet (1920N/0905E) hoppers of all instars were found at a density of 2000 per hectare and immature adults at a density of 1000 per hectares over 100 hectares. At Izouzadene (1935N/0818E) hoppers of all instars at a density of 2000-3000 per hectare and adults at a density of 2000 per hectare were found over 650 hectares. At Adrar Bous (2021N/0902E) hoppers were found at densities of 2000-5000 per hectares over an area of 10 hectares. Isolated mature adults and hoppers were present almost everywhere in Aïr at densities of 10-100 per hectare. In Wadi Iferouane adults at densities of 1000 per hectare were seen laying over an area of 5000 hectares on 23 August. In Tamesna isolated adults were seen in Ekedî Mellen (1915N/0555E) in mid-August. In early September 200 hectares of second and third instar hoppers were ground sprayed in north-east Aïr.

CHAD

As reported in Summary No. 107, a swarm flew west over Guereda on 7 August. On 11 August 705 hectares were ground sprayed 30 kilometres west of Guereda. Another swarm was reported at Djimere, 62 kilometres south of Guereda.

To the north, a helicopter survey on 19-21 August failed to locate any infestations in the area occupied by hopper bands and swarms in mid-July to the north and east of Kalait (1550N/2053E) but ground teams found numerous hopper bands as well as maturing adults in the area from late August. Up to 21 September 18299 hectares had been sprayed by ground teams within the area 1630-1535N/2044-2108E. By mid September many of the hoppers were in the fourth or fifth instars and second generation adults were appearing. Hoppers were also reported from Kourao (1640N/2258E). A high density swarm was seen on the road between Kalait and Fada on 7 September and laying adults were seen at densities of 800-1200 per hectare 62 kilometres north of Kalait.

There was an unconfirmed report of hopper bands 50 kilometres north of Zegui (1443N/1548E) in mid-September, and there was a report of Desert Locusts from Iriba (1508N/2215E).

MALI

Isolated adults were reported from Adrar des Iforas but no details are available.

There were no reports from MAURITANIA.

NORTH WEST AFRICA

Meteorology

From Meteosat imagery it appears there were scattered showers in southern western Sahara and central and southern Algeria in the second decade of August, in northern central Algeria in the third decade of August.

Breeding conditions

According to NOAA/AVHRR imagery conditions were unfavorable for breeding.

Locusts

No locusts were reported from the region.

EASTERN AFRICA

Meteorology

As reported in Summary No. 107 rainfall in eastern Sudan extended up to 23 degrees north in the first decade of August. In the second decade there was good rain in Northern Darfur and in Kassala Province. In the third decade there was only light rain north of 15 degrees north, and in the first decade of September there was only light rain north of 13 degrees north. In northern Ethiopia there were thundery showers over Wollo in early August. In the second decade there were moderate rains over the western lowlands of Eritrea and over Gonder and in the third decade of August and first decade of September there were further moderate rains over north-west Ethiopia. Overall, however, rainfall in the Ethiopian highlands was much below average. There were scattered showers along the Red Sea up to 18 degrees north.

Breeding conditions

Conditions were favourable for breeding over extensive areas in Sudan, including Northern Darfur where wadis were in flood in late August, Northern Kordofan, White Nile and Kassala Province. In Ethiopia, conditions will have been favourable for breeding in some of the valleys in the northern highlands, but overall conditions were much less suitable than is usual at this time of the year.

Locusts

SUDAN

NORTHERN DARFUR PROVINCE

On 6 August a swarm of unreported maturity flew over El Fasher from the west and headed south. On 7 August another swarm flew over El Fasher heading east. On 9 August a dense mature 4 sq. kilometres swarm was seen copulating and laying at Tawingy (1459N/2415E). Also on 9 August three small egg-fields were found in Wadi Owida (1522N/2328E); laying had occurred on 27 July. Between 30 July and 13 August there were reports of 10 immature swarms, three mixed maturity swarms and two mature swarms in the Umm Buru and Karnoi areas.

Subsequently, mature, copulating, laying swarms and egg-fields were seen to the north-west north and north-east of Kutum between 18 and 26 August. On 27 August second instar hopper bands were found in four localities around Biribiri (1522N/2518E). Ground control was in progress. By mid-September hopper bands had been found in 12 areas totalling 7119 hectares in the Karnoi, Musbat and El Fasher areas.

NORTHERN KORDOFAN - KHARTOUM PROVINCES

A mature swarm measuring 15 km X 3 km was seen west-north-west of Omdurman at 1555N/3150E on 12 August; another mature swarm measuring 3 sq. kilometres was seen at 1547N/3215E on 13 August; on 14 August adults were seen at densities of 3-4 per sq. metre at 1555N, 3200-3230E and a mature swarm settled at Khartoum. On 15 August a mature swarm settled at Surarab (1555N/3233E). On 17 August a mature 2 sq. kilometres swarm, density 5-10 per sq. metre, was seen at 1549N/3212E. Adults at densities of 1-5 per sq. metre were present in many wadis with green vegetation in the above general area. In mid-September small thin density, late instar hopper bands were found in nine localities totalling 4700 hectares west and north of Khartoum. Over 14720 kg of poisoned bait was applied.

To the west, small groups of copulating adults and scattered first instar hoppers were found in several localities around Hamrat El Wuz (1458N/3022E) in mid-August; in mid-September small group of first to third instar hoppers were found at four localities in the same areas and were being baited.

WHITE NILE PROVINCE

Following reports of scattered mature adults north-west of Ed Dueim from mid-August, some small early instar groups of hoppers were found and were being controlled in mid-September.

NILE PROVINCE

In early August, ground control operations were in progress against small groups of hoppers in the Baaluk (1640N/3510E) and Umm Shadida (1635N/3515E) areas in the west bank of the Atbara river, in the Hassaniya and Goz Abu Dulu and north-east of Berber. Baiting continued against hoppers and adults during September.

In mid-August Shendi district was invaded by swarms from the south-west. On 15 August a swarm measuring 50 sq. kilometres flew north-east over Umm Darwa (1616N/3351E); on 17 August a 60 sq. kilometres swarm flew over Bir El Geheid (1613N/3406E). In late August scattered mature adults were seen in Wadi Tibna (1624N/3239E) and ground control operations were in progress in three localities. By mid-September the situation was calm.

KASSALA PROVINCE

Scattered adults were reported in Wadi Odi in late August, from where there was an unconfirmed report of an immature swarm on the 26th.

ETHIOPIA

As reported in Summary No. 107, mature and immature swarms were present in the highlands of Eritrea and Tigray, up to 19 August and were being sprayed from the air. There were also hopper infestations in the highlands of Eritrea, Tigray and Wollo and in the western lowlands of Eritrea which were being controlled by ground units.

There have subsequently been no detailed reports about infestations but in the late August nomads entering Sudan reported large areas of swarms and hopper bands of all instars in Eritrea. Two Canadian helicopters were assisting ICRC fixed-wing spray aircraft to locate swarms up to mid-September in Eritrea and Tigray.

There were no other reports from the Region.

NEAR EAST

Meteorology

Scattered showers were reported from the Hijaz mountain and heavy showers were reported from Tizan and Asir. There were heavy rains during the first half of August over the People's Democratic Republic of Yemen.

Breeding conditions

Conditions were favourable for breeding the the south-west of the Shabwa Governorate, north and west of Ataq. Conditions were also favourable on the coast in Abyan Governorate.

Locusts

PEOPLE'S DEMOCRATIC REPUBLIC OF YEMEN

High density populations of copulating and laying transitiform adults were seen in Wadis Markhah (1450N/4625E), Matarif (1452N/4620E) and Waisit (1437N/4615E) on 13-16 August. The total area infested was 200 sq. kilometres. On 15 August maximum density adults were seen over an area of 50 sq. kilometres at Ash-Shubaykah (1440N/4647E). Low density adults and transiens fourth and fifth instar hoppers were observed at El Harur (1314N/4513E) on 19 August. Between 3 and 19 September large numbers of hopper bands of different instars were found at Nisab (1430N/4630E), Waisit and in Wadis Markhah, Matarif, Sa'd (1455N/4618E), Dhalim (1454N/4605E) and Jife (1455N/4555E). Wadis to north were also infested with hoppers. A few second and third instar hopper bands were seen at Ash-Shubaykah. Ground control was in progress.

KINGDOM OF SAUDI ARABIA

Scattered adults were reported between Shaqqah ash Shamie and Wadi Doga on the southern Tihama. At Khamis Harb the density was over 200 per hectare in early September. In mid-September solitary adults and hoppers were found over 30 sq. kilometres at Shiya (1848N/4130E).

YEMEN ARAB REPUBLIC

Small numbers of adults were reported from Al Jawf and Marib. There were no other reports from the region.

SOUTH-WEST ASIA

Meteorology

Rainfall was much below average during August; Barmer reported 2.0 mm; Jaisalmer a trace, Jodhpur 0.8 mm, Ganganagar 38.6 mm, Sikar 105.6 and Bikaner 23.3 mm.

There was no rain reported from the summer breeding areas in Pakistan in the first half of September.

Breeding conditions

Conditions were favourable for breeding in restricted areas.

Locusts

PAKISTAN

Scattered adults were seen in 31 localities in the first half of August, the maximum density being 740 per sq. kilometre at Punjkoholi (2745N/7055E) on 12 August. In the second half of the month scattered adults were seen at 42 localities, the maximum density being 600 per sq. kilometre at Gondi (2450N/7050E) on 21 August. In the first fortnight of September the maximum density was 600 per sq. kilometres at Jaidar.

INDIA

Scattered adults were found at 41 localities in the first half of August, the maximum density being 7500 per sq. kilometre at Kelawa (2655N/7140E) on 12 August. Small scale breeding was seen in eight localities in Jaisalmer, Bikaner and Jodhpur districts. A total of 6 hectares were treated. In the second half of August adults were seen in 29 localities, the maximum density being 5250 per sq. kilometre at Askandra (2722N/7145E) on 16 August. Further dusting was undertaken against adults and concentrations of hoppers at Loharki (2709N/7147E) and Kelawa up to 21 August. There were also small patches of hoppers at three other localities.

IRAN

In July hoppers and adults were reported over about 600 hectares near Zerebad in Baluchistan. Control was undertaken.

There were no reports from AFGHANISTAN.

FORECAST FOR OCTOBER-NOVEMBER

Gregarious second summer generation breeding occurred in Niger, Chad, Sudan and Ethiopia and several generation adults have appeared in eastern Chad. Control operations have been mounted in many areas, and widespread swarm formation has probably been checked but the situation in Chad and northern Ethiopia still gives cause for concern.

In West Africa, there has been widespread gregarious breeding in eastern Chad. Large scale ground control operations have been mounted but there have been a number of reports from outside the areas known to be infested which suggest that some infestations have not been found or reported. If there is substantial swarm formation in early October the swarm are most likely to move west-north-west across the Sahara but some could move west and augment populations already present and breeding in north-west Niger, while some might reach Mali or even Mauritania. Most of the adults reaching Niger, Mali and Mauritania are likely to breed. Some small swarms could invade the Region from the east.

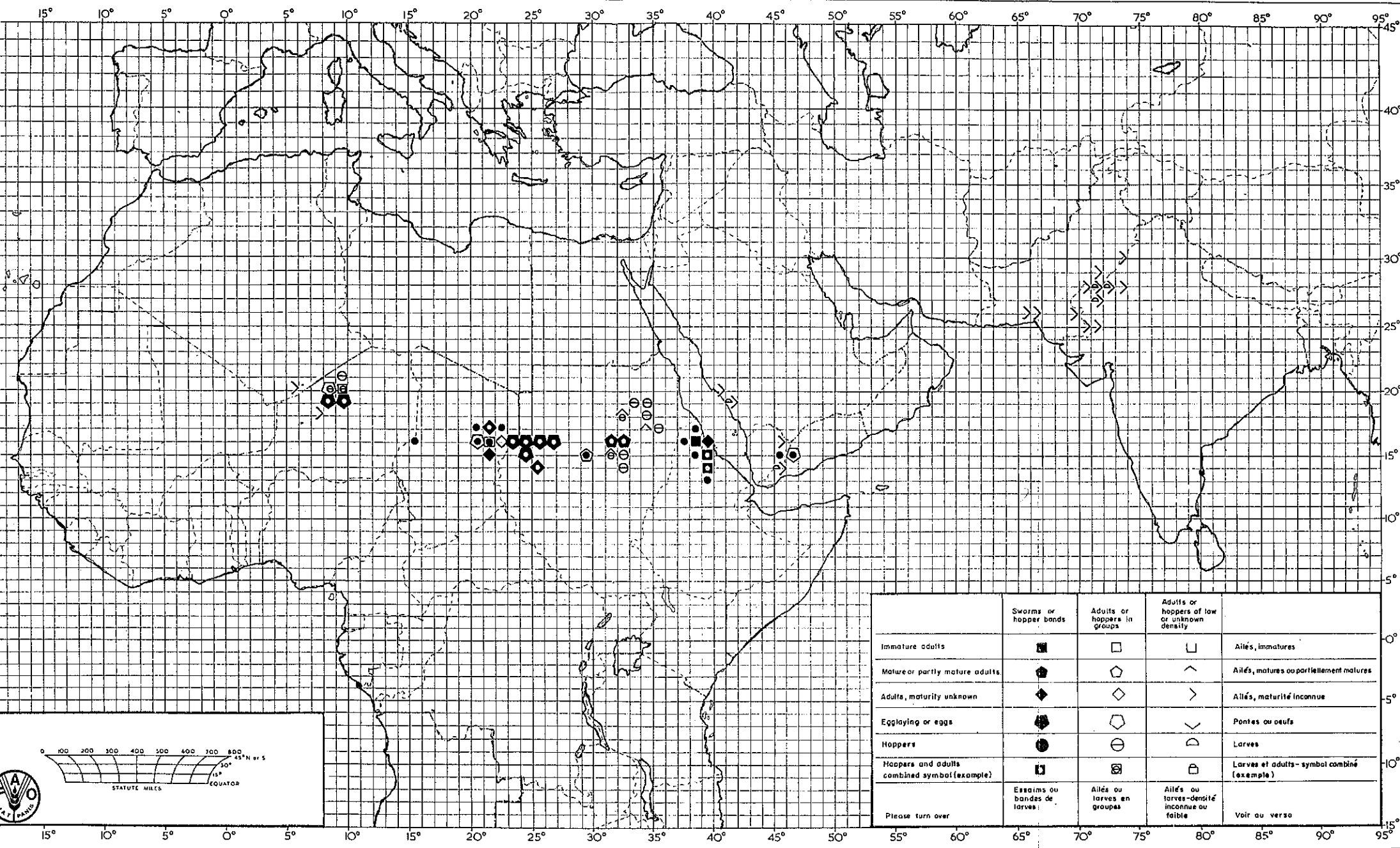
North-West Africa may be invaded by swarms from Chad in early October. These are most likely to move rapidly across southern Algeria and reach southern Morocco in mid-October. Most are likely to be prevented from moving further north by the Atlas mountains but some could move south into Western Sahara, North-central Algeria and Libya and could be invaded by swarms moving more directly northwards from Chad. Breeding could occur in the extreme south of Algeria.

In Eastern Africa any swarms produced in northern Ethiopia in early October are most likely to move south-east and, if not controlled, they will reach the traditional short-rains breeding area in the Ogaden and surrounding parts of Somalia. Any swarms reaching these areas will start to breed. If there are good rains in the north, most of the breeding will be in the north, but if the short rains fail in the northern areas the swarms will move south-west and may reach north-east Kenya before they breed. Any escapes in late October and November from northern Ethiopia are likely to move to the coastal plains and start to breed. Also, any escapes from eastern and central Sudan are likely to move to the Red Sea coastal plains.

In the Near East breeding is likely to continue in the People's Democratic Republic of Yemen. The western coastal plains of Saudi Arabia and the Yemen Arab Republic may be invaded by swarms from across the Red Sea. Breeding is likely to start in the areas receiving run-off from the mountains or early winter rains.

In South-West Asia summer breeding will terminate in Rajasthan and adjacent areas of Pakistan. Small numbers of adults will reach coastal areas of Baluchistan.

Rome,
29 September 1987



	Swarms or hopper bands	Adults or hoppers in groups	Adults or hoppers of low or unknown density	
Immature adults	■	□	└	Ailés, immatures
Mature or partly mature adults	●	◐	∨	Ailés, matures ou partiellement matures
Adults, maturity unknown	◆	◇	>	Ailés, maturité inconnue
Egg laying or eggs	⊙	◑	∟	Pontes ou oeufs
Hoppers	●	○	∩	Larves
Hoppers and adults combined symbol (exemple)	⊙	⊙	⊙	Larves et adults - symbol combiné (exemple)
Please turn over	Essaims ou bandes de larves	Ailés ou larves en groupes	Ailés ou larves - densité inconnue ou faible	Voir au verso

