



Report of Monitoring, Early Warning and Assessment of Desert Locust

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Desert Locust Monitoring and Loss Assessment in Algeria, Mauritania and Yemen (August 2026)

Integrated with multi-source Earth Observation data, e.g. meteorological data, field data, and remote sensing data (such as MODIS in the US, etc), and self-developed models and algorithms for Desert Locust monitoring and forecasting, the research team constructed the 'Vegetation pests and diseases monitoring and forecasting system', which could regularly release thematical maps and reports on Desert Locust.

The remote sensing monitoring showed that, in August 2026, desert locusts mainly affected localized areas in northwestern, central, and southeastern Algeria, southern Mauritania, and inland southern Yemen, affecting 21.8, 18.3, and 15.8 thousand hectares of vegetation, respectively. This month, the affected vegetation area declined in Algeria and Yemen, while it increased slightly in Mauritania. Locust conditions across the three countries showed the stage-specific pattern of "continued decline in Algeria, strengthening summer breeding in Mauritania, and adjustment in the distribution of damage in Yemen." In Algeria, spring breeding was largely over. High temperatures, dry conditions, and vegetation senescence further fragmented continuous suitable habitats, reduced the carrying capacity of earlier source areas in the northwest, and led to a relatively large decline in affected shrubland. Residual green patches in localized cropland, oases, and shrubland in northwestern Algeria could still temporarily retain solitarious adults. A small number of individuals may disperse toward central and southern areas along desert margins; however, discontinuous food resources and low soil moisture limited continued breeding and aggregation in the northwest, while summer breeding in the south and southeast still warrants attention. In Mauritania, localized rainfall increased the moisture content of sandy soils and



promoted pasture greening, simultaneously improving conditions for adult resting, feeding, sexual maturation, and oviposition. Southward-moving source populations from northern areas may have provided some replenishment, and monitoring results showed that locust activity increased in river valleys and grasslands in the south and southwest. Suitable habitats remained patchily distributed because of the uneven spatial and temporal distribution of rainfall. If wet conditions persist, egg hatching and hopper survival may increase, raising the risk of localized population growth. Remote sensing monitoring in Yemen showed that the distribution of affected vegetation shifted from the southern interior toward the Red Sea coast compared with the previous period, with localized areas along the western coast showing higher values of affected vegetation area. This change may be associated with monsoon moisture, localized convective rainfall, and wadi runoff in August, which promoted short-term greening in western coastal lowlands and favored resting and feeding by solitary adults. Parts of the interior received light to moderate rainfall in August and may support small-scale summer breeding; populations may subsequently move toward the Red Sea and Gulf of Aden coasts. Summer breeding may occur in southern and southeastern Algeria, and intensified surveys are needed. Summer breeding may continue in Mauritania; in areas receiving favorable rainfall, numbers of eggs, hoppers, and new-generation adults may increase, further raising the risk of localized aggregation. Small-scale summer breeding may occur in inland Yemen, and populations may subsequently move toward the Red Sea and Gulf of Aden coasts and begin winter breeding. Overall, no major change is expected. During this period, wheat and barley harvests in Algeria have largely ended; in southern Mauritania, rainfed crops such as sorghum, maize, and millet are at the seedling-to-stem-elongation stage, irrigated rice has entered the tillering stage, and natural pasture is growing rapidly; in Yemen, sorghum, maize, and millet are at the seedling-to-heading stages. Attention should be paid to the potential impacts of growing summer-breeding populations in Mauritania and localized breeding along the coast of Yemen on food crops and livestock production. The detailed results are as follows:

■ 1. Desert Locust Monitoring and Loss Assessment in Algeria

In August 2026, a group of immature transiens adults was observed west of Djanet in southeastern Algeria. After spring breeding ended, persistent high temperatures and limited rainfall caused vegetation to decline rapidly, gradually fragmenting suitable habitats in the northwest and reducing food resources and habitat carrying capacity. Residual green patches in localized cropland, oases, and shrubland could still attract adults for temporary resting and feeding, but were insufficient to support sustained population growth. Some adults may migrate short distances toward central and southern areas along desert margins. Inadequate soil moisture and the isolation of suitable patches may restrict continued breeding in the northwest, while summer breeding may still occur in the south and southeast. Monitoring results showed that in August 2026, desert locusts affected 21.8 thousand hectares of vegetation in Algeria, including 5.6 thousand hectares of cropland, 7.3 thousand hectares of grassland, and 8.9 thousand hectares of shrubland (Figure 1), accounting for 0.37‰, 0.58‰, and 0.34‰ of the country's total cropland, grassland, and shrubland areas, respectively. Sidi Bel Abbès recorded the most extensive damage, with 10.4 thousand hectares of affected

vegetation, followed by Mascara with 6.9 thousand hectares. Saïda, El Bayadh, and Illizi were also affected, with 3.8, 0.4, and 0.3 thousand hectares, respectively.



Fig. 1 Monitoring of Desert Locust damage in Algeria (August 2026)

■ 2. Desert Locust Monitoring and Loss Assessment in Mauritania

In August 2026, the center of locust activity in Mauritania gradually shifted from localized areas in the southeast toward river valleys and grasslands in the south and southwest. Localized rainfall and a temporary improvement in soil moisture promoted gradual pasture greening and progressively improved conditions for adult resting, feeding, sexual maturation, and oviposition. At the same time, southward-moving source populations from northern areas may have converged with local populations. Scattered hoppers were already observed locally, indicating that breeding had occurred. Because rainfall coverage remained discontinuous, suitable areas were separated from one another, and locust populations overall remained at low densities, with localized, and sporadic occurrences. If wet conditions persist, egg hatching and hopper survival may increase further, and the risk of localized population buildup and aggregation in southern Mauritania will continue to warrant close attention. Monitoring results showed that in August 2026, desert locusts affected 18.3 thousand hectares of vegetation in Mauritania, including 0.1 thousand hectares of cropland, 17.8 thousand hectares of grassland, and 0.4 thousand hectares of shrubland (Figure 2), accounting for 0.01%, 0.16%, and 0.08% of the country's total cropland, grassland, and shrubland areas, respectively. Gorgol recorded the most extensive damage, with 5.9 thousand hectares of affected vegetation, followed by Assaba with 4.7 thousand hectares. Brakna, Guidimaka, and Hodh el Gharbi were also affected, with 4.3, 2.9, and 0.5 thousand hectares, respectively.



Fig. 2 Monitoring of Desert Locust damage in Mauritania (August 2026)

■ 3. Desert Locust Monitoring and Loss Assessment in Yemen

In August 2026, the distribution of affected vegetation in Yemen shifted from the southern interior toward the Red Sea coast compared with the previous period. The area of affected cropland increased while affected shrubland decreased, indicating that adults may be concentrating in coastal cropland and green patches along wadis. This change may be associated with monsoon moisture, localized rainfall, and runoff, which promoted short-term greening of lowlands along Yemen's western coast and provided favorable conditions for solitary adults to rest, feed, and breed sporadically. Subsequent movement of inland populations toward the Red Sea and Gulf of Aden coasts should be closely monitored. Monitoring results showed that in August 2026, desert locusts affected 15.8 thousand hectares of vegetation in Yemen, including 3.8 thousand hectares of cropland, 4.8 thousand hectares of grassland, and 7.2 thousand hectares of shrubland (Figure 3), accounting for 0.77%, 0.12%, and 0.13% of the country's total cropland, grassland, and shrubland areas, respectively. Al-Hudaydah recorded the most extensive damage, with 10.4 thousand hectares of affected vegetation, followed by Lahij with 4.2 thousand hectares. Ta'izz, Abyān, and Ad-Dāli were also affected, with 0.7, 0.4, and 0.1 thousand hectares, respectively.

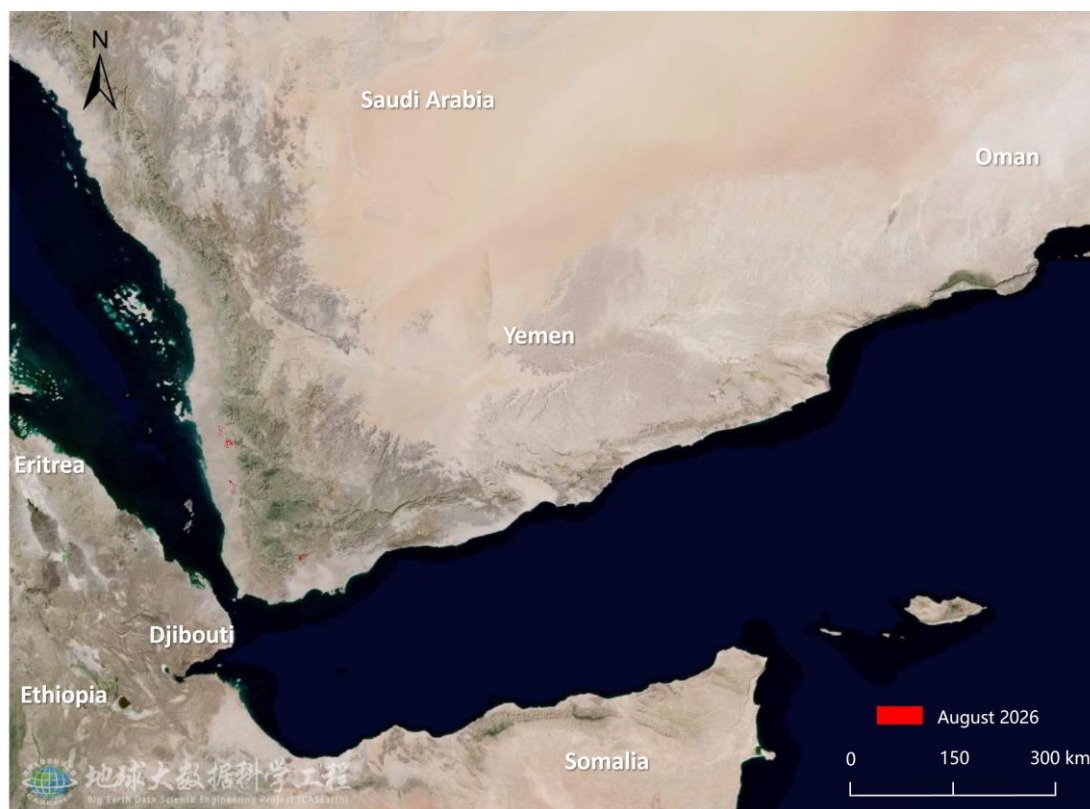


Fig. 3 Monitoring of Desert Locust damage in Yemen (August 2026)

The analysis indicates that summer breeding may occur in southern and southeastern Algeria. Summer breeding may continue in Mauritania; in areas receiving favorable rainfall, numbers of eggs, hoppers, and new-generation adults may increase, further raising the risk of localized aggregation. Small-scale summer breeding may occur in inland Yemen, after which populations may move toward the Red Sea and Gulf of Aden coasts and begin winter breeding. Overall, no major change is expected. Continuous monitoring of desert locust dynamics in Algeria, Mauritania, and Yemen is recommended to support timely control measures and reduce the potential impacts of recurrent locust activity on food crops and agropastoral production.

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