

Artificial Lights Cause Decline in Insect Population

VOCABULARY WORDS

1. eye-opening (of an event or situation) serving as an eyeopener; enlightening
Example: This documentary should be an eye-opening experience to all.
2. hedgerow /'hej,rō/ a hedge of wild shrubs and trees, typically bordering a road or field.
Example: The neighbors gathered blackberries from the hedgerow.
3. taken aback /tākn ə'bak/ to surprise or shock (someone)
Example: When I told him my answer, he seemed taken aback.
4. drastic /'drastik/ extreme and basic thing done to solve a problem
Example: He's not going to do anything drastic about economic policy.
5. disruption /dis'rəpSH(ə)n/ the prevention of an event, system, or process from continuing or operating in a normal way.
Example: The strike is expected to cause delays and disruption to flights from Britain.



Scientists have discovered that street lights and other forms of artificial lighting could be behind a decline in insect populations. Researchers from the UK Center for Ecology and Hydrology conducted studies on the number of insects living near sources of white light from light-emitting diodes (LEDs).

The researchers said LEDs are responsible for disturbing insect behavior and for causing a drop in their numbers. Lead researcher Douglas Boyes said the results of his study

were "**eye-opening**". He was surprised at the range of insect loss due to LEDs. He found a 47 percent decrease in insect populations at **hedgerow** test sites and a 37 percent reduction at roadside grassy areas.

Mr Boyes and his team set up LEDs at 26 roadside sites in the countryside that contained either hedges or grass edges. The researchers counted the numbers of moth caterpillars found at these sites and compared these with insects found at unlit sites. Boyes commented on the difference.

He said: "We were really quite **taken aback** by the obvious difference." He posited that LEDs led to two **drastic** changes in behavior. He said the most worrying discovery was that the lights stopped female insects laying eggs in the lit areas. Another **disruption** was that the lighting disturbed the feeding behavior of the insects. The caterpillars in the unlit areas were heavier than those in the areas lit by LEDs.

DISCUSSION

1. What harm does light pollution do?
2. In what ways does light pollution affect you?
3. Why might artificial light harm insects and other creatures?
4. What happens when the numbers of insects fall?
5. Should we reduce the amount of artificial lighting?
6. What role do moths play in nature?