

The algae blooms melting Greenland

The disappearance of Greenland's ice sheet is accelerating thanks to huge blooms of algae newly growing on top of it, reports *The New York Times*. With the Arctic warming four times faster than the global average, Greenland, the world's largest island, is now losing hundreds of billions of tons of ice each year. The warming has led to a feedback loop: As more ice melts, more nutrients are released from the ground, creating more algae. Then the algae in turn quicken the melting process, because the dark-colored blooms limit the ice's ability to reflect the sun's heat. A new study shows

that this process is responsible for as much as 13% of the ice sheet runoff in southwest Greenland, where there is a prominent algae dark zone. That study also shows that tiny traces of the photosynthetic organisms can be carried through the air—a clue to how they colonize new areas of ice in the first place. Another study shows that the nutrients the algae feed on are embedded in every layer of ice that has built up over time, so the blooms are unlikely to run out of fuel. "The more it melts, the more they bloom," says German biogeochemist Liane Benning, who worked on both papers. "But they are not a cause of warming. We



The dark patches are algae.

should change our habits and not burn so many fossil fuels."