

A Hope for the Reefs

John R. Pringle

On coral reefs the world around,
Most wondrous creatures do abound.
How sad it is to have to say,
This spectacle may go away.

Reefs are built by coral polyps,
Bit by bit in tiny dollops.
And then provide a 3-D home
For those who in the sea do roam.

The polyps live in water clear,
So one might think starvation's near.
Nematocysts are set to shoot,
But without prey, harpoons are moot.

Yet thrust for growth and building comes
From photosynth that really hums.
The dinoflagellates inside
Pump ATP through every tide.

A mutualism co-evolved,
Cohabitation's problems solved.
But now the reefs are prone to bleach,
No site is safe, beyond man's reach.

And those who live upon the reef
From greenhouse gases come to grief.
Temperature rises, pH falls,
The ROS release then galls.

Too common now, the coral head
With symbionts expelled or dead.
Less production, fewer niches;
Catastrophic system switches.

But can we save them? That's not clear.
The time is short, research is dear.
The underfunded science slows,
While every day the danger grows.

To save the reefs we need to know
Just how their cells divide and grow.
But corals in the lab are hard,
With features that research retard.

Luckily we have *Aiptasia*,
Model system to amaze ya.
Experiments with it we'll do
That insights give both deep and true.

And then we can to reefs return,
Their secrets better now to learn.
With knowledge we may dodge the worst,
And by the future not be cursed!