The coastal waters of Maine have been subject to fairly regular *Alexandrium* harmful algal blooms (HABs) since the early 1970s. These events have varied in strength and duration over the years, but the event that occurred in 2005 appeared to be one of the most intense HAB events on record for several reasons, including record scores at some stations, toxin in areas that had never been over quarantine levels in the past, and record levels of toxin in certain species which had never been over quarantine in the past. Unfortunately, there is currently no definitive index to measure the severity of an *Alexandrium* HAB event in Maine from season to season, so I have created an index which takes into account several of the most prominent factors of a HAB event, and does in fact demonstrate that the 2005 event was one of the worst on record.

The economic losses associated with a severe HAB event in Maine are devastating, and as a result, the Maine Department of Marine Resources will be trying several new approaches to managing PSP monitoring more effectively in 2006. We have had a successful dialogue with our state legislature this past winter, which resulted in the approval of monies to go toward seven new seasonal positions to help with PSP monitoring and other water quality issues; we are trying to redistribute volunteer monitors and enhance training for the Phytoplankton Monitoring Program, to help increase an early-warning system, and we have designed a collaborative study with the Casco Bay Estuary Project to get a much finer scale of sampling done by boat in the Casco Bay area, which may serve as a model to use in other areas in future years.