

INLAND FISHERIES DIVISION *PRYMNESIUM PARVUM* TASK FORCE

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PREFACE

Although golden alga *Prymnesium parvum* appears to have been in Texas for more than 20 years, it only became a public issue in 2001 when it caused massive fish kills at Dundee State Fish Hatchery and in major economically important reservoirs in north and central Texas. Following the devastating effects of *P. parvum* on fish at the Dundee State Fish Hatchery, a group of Inland Hatcheries biologists formed the *P. parvum* Task Force to develop strategies to control the alga and maintain the viability of the fish hatcheries – Dundee and Possum Kingdom State Fish Hatcheries – located in the affected region.

After months of synthesizing available information, group discussions and conducting various research studies, the task force developed strategies for controlling the alga to allow successful culture of fish at the affected hatcheries. This document contains some of the written reports prepared by members of the task force on research findings, review summaries and management plans; a few reports published in mainstream journals are not included here. The purpose of this document is to consolidate the reports for easy access and to share what strategies work at Texas hatcheries and how to implement them. Because of design shortfall (e.g., small sample sizes or inadequate replications) associated with some of the research studies, we caution readers to consider some of the results as preliminary. Efforts continue to revisit some of these studies, as resources become available, to confirm findings as well as to conduct new research to find more effective and efficient ways of dealing with the alga. As new strategies are developed, the management plans in this document will be updated. We invite interested persons to call the Dundee or Possum Kingdom State Fish Hatchery from time to time for any future updates.

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Jerry Brand and Alexandra Holland of the University of Texas – UTEX Culture Collection of Algae in Austin, Texas donated a pure *P. parvum* culture for research, and Isaac Bejerano and Elizabeth Maor of the Central Fish Health Laboratory in Israel offered expertise and protocols for monitoring *P. parvum* ichthyotoxin and treating toxic blooms in fish culture ponds. We are indebted to them for their generosity and professionalism.

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