



## Smithsonian Environmental Research Center

March 30, 2021

TO: Environment and Natural Resources Trust Fund  
SUBJECT: Support of Dr. David Remucal's proposal: Promoting Minnesota  
Conservation through Classroom Plant Science Research

I am pleased to provide a letter of support for Dr Remucal's proposal to develop a classroom-based program in Minnesota in support of furthering educational goals as well as providing an exciting scientific experience for students. The program that Dr. Remucal proposes is an outgrowth of the Orchids in the Classroom (OIC) program that the North American Orchid Conservation Center (NAOCC) initiated in collaboration with the Fairchild Tropical Botanic Garden. The OIC, in turn, is an outgrowth of Fairchild's very successful Million Orchid project.

NAOCC initiated the OIC effort as one component of its goal of conserving native orchids in the U.S. and Canada. In addition to conserving the genetic diversity of all native orchids and the orchid mycorrhizal fungi that they require, NAOCC seeks to engage collaborators around the country to support conservation and education goals. In addition to the OIC program, NAOCC has developed an interactive web site (Go Orchids) that has all of the native orchids in the U.S. and Canada. NAOCC has also developed a series of 28 paper punch-out models of native orchids (*Orchid-gami*) that engage the public in educational opportunities. To date, more than 50,000 of the models have been distributed and a commercially produced box-set of 20 models and an accompanying 48 page booklet is currently being developed..

The goal of OIC is to provide students with hands-on experiences in conducting research that has several benefits. The program engages students in all aspects of hands-on research. Students provide input on the goals of the research. Students set up and conduct the experiment during a semester. Students collect and processing data and they share the results electronically with students in other groups/schools that were engaged in the same process.

The OIC that NAOCC has been conducting for the past three years has been supported by grants from the Smithsonian Institution and the participating schools have been in the Washington DC and surrounding suburban counties. During COVID-limited times, the program continues virtually. All schools (elementary, middle, high school) participating in the program are in resource-limited school districts. The program has been externally evaluated and the results of the evaluation were very positive from the perspectives of the teachers and students. Given the success of the OIC program thus far, NAOCC has set a goal of expanding the program to the national level. As part of that goal, we invited individuals from several states to attend one of the teacher-training workshops at SERC. David Remucal and his staff from the University of Minnesota Landscape Arboretum

647 Contees Wharf Road  
Edgewater, MD 21037-0028  
443.482.2226 Telephone  
443.482.2380 Fax

(UMLA) participated in the workshop and subsequently initiated a pilot project in Minnesota that resulted in the proposal to the Environment and Natural Resources Trust Fund. If the proposal is funded, UMLA will be the first major metropolitan area outside of DC to initiate an OIC-related effort and the number of schools that will be included in the program will be the largest in the country.

As the Founding Director of NAOCC, I am fully supportive of Dr. Remucal's proposal. The UMLA has been a collaborator of NAOCC since its inception and has supported the program by collecting samples of orchids and orchid mycorrhizal fungi. The orchid conservation program that Dr. Remucal has developed at UMLA is one of the most active and successful orchid conservation efforts in the country. UMLA has all of the resources and expertise to assure success of the proposed project. The expansion of the UMLA program into schools is yet another example of their commitment to conservation and education. As indicated, the program will also represent a major step forward in NAOCC's goal of expanding the OIC program into a national effort to support orchid conservation through educational efforts.

I support the proposal without reservation and NAOCC is prepared to support the effort in every way possible.

Sincerely

A handwritten signature in cursive script, appearing to read "Dennis P. Whigham".

Dennis Whigham, Ph.D.  
Senior Botanist  
Founding Director, North American Orchid Conservation Center