

ORNAMENTAL HORTICULTURE TECHNOLOGY

PROGRAM REVIEW PANEL REPORT

SEPTEMBER 15, 1999

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**ORNAMENTAL HORTICULTURE TECHNOLOGY
PROGRAM REVIEW PANEL**

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TABLE OF CONTENTS

		<u>Page</u>
Section 1	Ornamental Horticulture Technology(OHT) Program Overview	3
Section 2	Program Evaluation Plan: Techniques and Budget	10
Section 3	Graduate Survey	13
Section 4	Employer Survey	26
Section 5	Biology Faculty Perceptions of the OHT Program	31
Section 6	Program Faculty Perceptions of the OHT Program	36
Section 7	Current Students Perceptions of the OHT Program	43
Section 8	Advisory Committee Perceptions of the OHT Program	52
Section 9	Labor Market Analysis	58
Section 10	Evaluation of Facilities and Equipment	69
Section 11	Curriculum Evaluation	73
Section 12	Employment Trends	76
Section 13	Program Productivity and Costs	78
Section 14	Conclusions	80
Section 15	Recommendations	82
Section 16	Appendix	84

SECTION 1

**ORNAMENTAL HORTICULTURE TECHNOLOGY
PROGRAM OVERVIEW**

ORNAMENTAL HORTICULTURE TECHNOLOGY OVERVIEW

History:

The Ornamental Horticulture Technology(OHT) program accepted the entering class in the fall semester of 1974. The OHT program had been in the planning stages for a number of years prior to accepting the first class. The individuals that initially established this program at Ferris State University were able to combine the needs that were expressed by industry with the academic framework necessary to prepare graduates for employment in the industry. Since its inception, the program has stressed a "hands on" approach for the preparation of its students. The two year, five semester program that leads to an Associates degree in Applied Science is a broad-based program. The program prepares students for employment in the many career options in the horticulture industry. Some of these career tracks include golf course management, nursery management, landscape design, landscape construction, botanical garden management, grounds maintenance as well as a number of careers in the supporting services in this industry. It has been the intention not to prepare students for a limited number of these career areas but to provide the broad based educational preparation that affords the students options. If a particular segment of the industry has fewer employment opportunities, many other options exist. These employment options give the student opportunities to diversify within the industry. Through the coursework that the students take, especially with the strong laboratory component, they are well prepared for employment.

Even though other horticulture programs are available in Michigan, the program at Ferris State remains unique. The two year Associate of Applied Science degree in Ornamental Horticulture Technology that is granted to graduates and the hands-on instruction that its students receives is not available at other schools or universities in Michigan.

The Curriculum:

The OHT program stresses broad-based educational preparation for employment in the horticultural industry. This is accomplished through the carefully prepared curriculum that the program uses. This curriculum is the result of several curricular reviews and revisions. The program has changed as industry has placed new demands on educational programs and the students it prepares. The OHT curriculum that is in place today is the product of industry requirements combined with a solid academic foundation.

The general education core is the framework around which the technical courses are arranged. First year students are taught a group of courses that introduce them to the basics of plant science. Courses include basic botany, an introduction to plant identification, entomology, plant pathology and soil science. These courses all have application across all employment goals that the students might have. After the introductory year of courses is completed, the student is required to complete a summer semester internship. The internship is a cooperative effort between Ferris State University and employers in the various career fields within ornamental horticulture. The student has by this time selected a career area in which to direct his or her internship preparation. The intern from Ferris State is sought after by industry. Employers know that our students are well prepared in the basics. They also know that our students are motivated. They are willing to work to improve their job skills so they are prepared for permanent employment in the industry. Industry employers have a vested interest in our horticulture program. It is from programs like ours that future employees are being trained. By hiring our interns, the employer has access to qualified and prepared students. This helps the employer because of a severe employee shortage and it gives the intern an opportunity to gain valuable on the job work experience.

When the student returns for the second year they have opportunity to prepare by taking coursework that is less general or introductory in nature. The courses are more specific to particular career areas. Students take courses in turf management, landscape design, plant propagation and landscape plant management. In addition, students participate in a horticulture seminar where they research a horticulture topic and prepare an oral presentation. This gives the student opportunity to do more in depth library research and to present this information to the class.

In addition to a number of directed electives, the students take a course in small business management. The students often have aspirations of having their own business, while others will likely work for a small business. This course is very beneficial to every student's preparation for employment in this industry.

Program Facilities:

The OHT program has use of two laboratories that serve our purposes reasonably well but could use additional equipment such as additional microscopes, drawing tables and growth chambers. The labs, located in the Science Building, are adjacent to the greenhouse. The greenhouse is located on the second floor of the Science Building. Its current size and design is inadequate to serve the needs of the program. A new greenhouse is currently being designed, but additional funds will be required before construction can begin. The program also utilizes the campus as an outdoor laboratory, using the landscape plantings found around campus buildings. The program also utilizes Katke Golf Course as a teaching facility. At Katke in addition to the turfgrass related facilities, a tree nursery is maintained with an inventory of over 300 trees. The students care for these trees, eventually placing them around Katke Golf Course.

The Program Faculty:

The program currently has one full time faculty member assigned to it. Professor John Vanderploeg is the program coordinator and also teaches nine of the program core courses. In addition he teaches a course during the summer for the Professional Golf Management(PGM) program, a course that is mandated by the Professional Golfers Association which accredits the PGM program. He also teaches a course in field botany, which is required for biology education majors. This brings the total courses taught each year to eleven when overload courses are included. In addition, Prof. John Vanderploeg coordinates the program and participates in department, college wide and university wide committees. Dr. Philip Watson teaches Insect Pest Management for the program. Dr. Roger Mitchell teaches Basic Botany to the program students. We are also utilizing the expertise of an adjunct faculty member, Dr. James Scott, who teaches courses in soil science and basic plant propagation. Through our internship program we utilize the expertise of the cooperating employers who contribute their knowledge to the preparation of our students.

The Relevance of the Ornamental Horticulture Technology Program to the Mission of Ferris State University:

The Ferris State University Mission Statement reads: *Ferris State University will be a national leader in providing opportunities for innovative teaching and learning in career-oriented, technological and professional education.* The OHT program prepares students for careers in the horticulture industry. Horticulture is a multi-billion dollar industry that is one of the largest in Michigan. This industry has a

critical shortage of qualified employees. This is recognized by the industry as the most critical issue for continued growth. The industry is looking to schools like Ferris State to supply the technically and academically prepared graduates that will assume key industry positions. The industry wants more than technically trained individuals. They want graduates of programs who have prepared academically as well as technically. They want employees who can meet customers with the confidence that comes from preparation like that received in the OHT program.

The Contribution of the Program to the University:

The Ornamental Horticulture Technology program contributes to the University in a number of ways. The OHT program brings to the University a number of students who come here specifically for this program. While there are other degree granting institutions in the state, this program is unique in its course offerings and its hands-on approach to preparing students for employment in this profession. The students are typically above the average of those who attend FSU. They are very motivated and academically prepared to take their place as students in the university. As these students graduate they enter the work force and contribute to society. Many start their own businesses. In doing so, they help build the economic base in Michigan.

The OHT program faculty contribute to the university community through the expertise that they bring to committees across campus. They also contribute to the local, statewide and national community by lending their expertise to civic groups, clubs and organizations that value their knowledge of plant sciences and horticulture. This willingness to share information gives the University an exposure across the state and nation.

The Relationship of the Ornamental Horticulture Technology Program to Other Programs:

The Ornamental Horticulture Technology program is independent of other programs in the Biological Sciences; outside the department it contributes by teaching courses for the Professional Golf Management(PGM) and Biology Education programs. In the PGM program, the OHT faculty are the only ones on campus qualified to teach a course that is specifically required by the accreditation agency, the PGA. This association with the PGM program has existed since the time when the PGM program was first started. Due to restructuring which reduced the number of faculty in OHT, it was necessary to scale back involvement in the PGM program even though this has lead to a reduced quality of preparation for the PGM student.

Program Strengths and Concerns:

Program Strengths:

- 1. Broad-based educational preparation of our graduates**
- 2. The hands-on training that students receive**
- 3. Quality of instruction that the students receive**
- 4. The dedication of the faculty as educators and advisors**
- 5. The small class size, which allows for student/faculty interaction**
- 6. The demand by industry for our graduates**
- 7. One hundred percent placement in the horticulture industry**
- 8. The ability of the program to be laddered into advanced degree programs in biology, marketing and business**

Program Concerns:

- 1. Program facilities need to be improved, specifically a new greenhouse**
- 2. To attract more qualified students to the program to meet the tremendous demand for our interns and graduates. The ratio of opportunities to students exceeds 10 : 1. Improved facilities will allow us to attract more students**
- 3. To increase the number of faculty who teach in the program so the program coordinator will not be teaching overloads every semester. The program coordinator can then address some of the concerns listed above**
- 4. To establish a separate supply and equipment budget base for the program within the Biology department operating budget**
- 5. Inadequate budget for student employment**

MISSION STATEMENT ORNAMENTAL HORTICULTURE TECHNOLOGY PROGRAM

MISSION:

The mission of the Ornamental Horticulture Technology program is to prepare students for employment in the ornamental horticulture industry. The Ornamental Horticulture Technology program integrates foundational courses in plant sciences, hands-on laboratory experiences and courses in general education resulting in graduates that are in high demand by industry. At the conclusion of the two-year curriculum, the Associates of Applied Science degree is conferred. Students will be ready to assume their place as professionals in the horticulture industry and as citizens in our society.

GOALS:

- 1. To expose students to basic general education coursework.**
- 2. To introduce students to the principals and practices associated with plant care and maintenance.**
- 3. To introduce students to the technical skills necessary for employment in the horticulture industry.**
- 4. To increase student awareness of the opportunities that exist in the industry as well as the job skills necessary to secure such employment.**
- 5. To provide quality advising for students in the OHT curriculum.**
- 6. To maintain up to date facilities and equipment with which to instruct students in the skills and procedures necessary for the horticulture industry.**

SECTION 2

**PROGRAM EVALUATION PLAN
TECHNIQUES AND BUDGET**

PROGRAM EVALUATION PLAN

Ornamental Horticulture Technology

Degree Awarded: A.A.S. in Ornamental Horticulture Technology

Program Review Panel:

Chair and Program Coordinator: John Vanderploeg
Program Faculty: Phillip Watson
Biology Dept. Head: James Hoerter
Faculty Outside of A/S: Robert Krueger
Program Alumni: Lionel MacKenzie

Purpose: To conduct a review of the Ornamental Horticulture Technology program so it can adequately meet the needs of students, employers and the horticultural industry. This will be done by assessing the current curriculum, facilities and personnel needs. In doing so, the program can respond to the future needs of this industry.

Data Collection Techniques:

- 1. Graduate follow-up survey**
- 2. Employer follow-up survey**
- 3. Student evaluation of the program**
- 4. Faculty perception of the program**
- 5. Advisory committee perception of the program**
- 6. Labor market analysis**
- 7. Evaluation of facilities and equipment**
- 8. Curriculum evaluation**

<u>Activities</u>	<u>Leader</u>	<u>Target Date</u>
Graduate Survey	Mackenzie	Jan. 21, 1999
Employer Survey	Mackenzie	Jan. 21, 1999
Student Eval. of Program	Vanderploeg	Jan. 21, 1999
Faculty Perception of Program	Watson	Jan. 21, 1999
Advisory Committee Perceptions	Vanderploeg	Jan. 21, 1999
Labor Market Analysis	Vanderploeg	Jan. 21, 1999
Eval. of Facilities and Equip.	Watson	Jan. 21, 1999
Curriculum Evaluation	Vanderploeg	Jan. 21, 1999

PROGRAM EVALUATION PLAN
Ornamental Horticulture Technology
Proposed Budget

SURVEYS

Copying Costs	\$40.00
Mailing Costs	\$200.00
Return Mailing	\$200.00
Web Page Response Forms	\$300.00

TELEPHONE EXPENSES

\$75.00

FINAL DOCUMENT COPYING COSTS

\$75.00

TOTAL

\$890.00

SECTION 3

GRADUATE SURVEY

Graduate Survey

The students who graduated from the Ornamental Horticulture Technology program since 1990 were contacted and asked a number of questions utilizing the form that is found following this page. The University's records of graduates were not always accurate so not all students could be located. Of those who were located about 50% choose to respond to the survey. The nature of the questions and the response to them are found on the following pages. Some references to faculty members and courses that existed at the time that the student attended Ferris might have changed since then. The graduate survey and the entire program review document will be used by the program coordinator and advisory committee to evaluate what we are currently doing as well as what changes need to be made to address student concerns.

Several areas of concern were noted. Graduates of the program seemed to be somewhat concerned with the lack of sufficient facilities and equipment to run this program effectively. This is a concern that will appear in many places in this review document. Another area for concern is the level of "hands on" instruction that is provided in this program. The program through its advisory committee will address this issue, working toward more "hands on" experience for students in this curriculum.

Areas where graduates gave the program high marks include the quality of the faculty, the value of the internship experience, good advising and overall satisfaction with the program.

GRADUATES PERCEPTIONS
OF THE ORNAMENTAL HORTICULTURE TECHNOLOGY PROGRAM

The Ornamental Horticulture Technology Program Review Panel would appreciate your candid responses to the following questions. Please circle the response that most closely represents your opinion. Use the space below each question to explain your response.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Unknown
1. The program is academically sound.	1 47.2%	2 47.2	3 2.8	4	5	U 2.8
2. The program is technologically sound.	1 27.8	2 50	3 16.7	4 2.8	5 2.8	U 2.8
3. The program is administered effectively.	1 63.9%	2 30.5	3 2.8	4	5	U 2.8
4. The facilities and equipment were sufficient to support quality education.	1 13.9%	2 52.8	3 25	4 5.6	5	U 2.8
5. The program courses were taught by qualified faculty.	1 75%	2 25	3	4	5	U
6. The program courses provide sufficient coverage in each of the subject areas.	1 25%	2 63.9	3 11.1	4	5	U
7. The program courses provided information that you found to be valuable to your career preparation.	1 41.6%	2 50.0	3 8.3	4	5	U
8. The program utilizes sufficient lab experiences to enhance your career preparation.	1 38.9%	2 47.2	3 13.9	4	5	U
9. The program coursework covered relevant information.	1 50.0%	2 44.4	3 5.6	4	5	U
10. The program includes sufficient instruction in oral and written communication.	1 47.2%	2 41.7	3 11.1	4	5	U
11. The program courses are sufficiently challenging academically.	1 55.6%	2 38.9	3 5.6	4	5	U
12. Instructors seem interested in the academic progress of students.	1 66.7%	2 27.8	3 5.6	4	5	U

13. As a student you received adequate advising.	1 66.7%	2 22.2	3 8.3	4 2.8	5	U
14. The internship was an important part of the program.	1 75.0%	2 16.7	3 8.3	4	5	U
15. The program courses utilized enough "hands on" experiences.	1 36.1%	2 38.9	3 13.9	4 8.3	5 2.8	U

Any questions that you wish to answer more completely or any other responses you may have can be recorded on the back of this form.

16. Are you currently employed in the horticultural industry? If so please indicate your employer and position.

If not, please indicate the reason.

17. What is the greatest strength of the Ornamental Horticulture program?

18. What is the greatest weakness of the program?

19. Which of the core courses did you find to be of the least value to you as a graduate?

20. Are there any courses not currently offered that you think would be a benefit in your employment?

OPTIONAL Your name and address

Graduates Perceptions of the Ornamental Horticulture Technology Program

1=Strongly Agree, 2=Agree, 3=Neutral, 4=Disagree, 5=Strongly Disagree, U=Unknown

1. The program is academically sound.

1-17/36 (47.2%), 2- 17/36 (47.2%), 3- 1/36 (2.8%), U-1/36 (2.8%)

- Good curriculum
- I felt that the classes were very strong academically.
- Classes appropriate

2. The program is technologically sound.

1-10/36 (27.8%), 2-18/36 (50%), 3-6/36 (16.7%), 4-1/36 (2.8%), U-1/36 (2.8%)

- Greenhouse facilities need upgrading.
- There wasn't much offered "computer wise" when I was enrolled.
- Lots of lab time in the program which made it technologically sound.
- Good balance
- More stress on turf related issues.

3. The program is administered effectively.

1-23/36 (63.9%), 2-11/36 (30.5%), 3-1/36 (2.8%), U-1/36 (2.8%)

- John is one of the finest instructors I've ever known!
- I believe the program had a great core of classes, I seem to think they built off one another.

4. The facilities and equipment were sufficient to support quality education.

1-5/36 (13.9%), 2-19/36 (52.8%), 3-9/36 (25%), 4-2/36 (5.6%), U-1/36 (2.8%)

- Again, greenhouse facility is not suited for production/teaching use.
- Could have been better.
- We received quality education but would have been nice to have a larger greenhouse and research area.
- Could always use new equipment for labs.
- In 1993 the 'CAD' time/equipment was limited.
- There should be a classroom designed only for OHT with desks all facing the front.
- Need more funding for projects.

5. The program courses were taught by qualified faculty.

1- 27/36 (75%), 2-9/36 (25%)

- Yes, very qualified.
- Less in depth, more practical everyday.

- Dr. Mitchell is qualified but hard to follow.
- At least 2 out of 3; Vanderploeg and Watson.
- Except for Turf Man. and Soil Science.
- Mr. Vanderploeg is very qualified, extremely knowledgeable in all areas of our field.
- I agree with the exception of Bob Boufford.
- I feel that Vanderploeg is very qualified even though he could make some things more exciting than they really are, i.e. turf.
- All the instructors I had all knew the subject matter well.
- I questioned the teaching ability of only one instructor.

6. *The program courses provide sufficient coverage in each of the subject areas.*

1-9/36 (25%), 2-23/36 (63.9%), 3-4/36 (11.1%)

- Generally, I think an overview of all the bases were covered.
- Another course on design would be very beneficial.
- I agree but more depth in some areas is possible.
- I think more information could be given on propagation.
- Degree covers very broad employment range.
- I think we needed more coverage to the Golf Course side, and how to "Landscaping".
- Except Turf Man. and soil science.
- A separate soils class and propagation would be nice.
- There could have been more landscape construction info/education.

7. *The program courses provided information that you found to be valuable to your career preparation.*

1-15/36 (41.6%), 2-18/36 (50%), 3-3/36 (8.3%)

- The program has given me a good background knowledge and a starting point for a career of learning.
- Although with the design class it would be nice to have had guests to get more than one persons point of view.
- Plant ID and knowledge has helped me know what is good/bad in a given environment.

8. *The program utilizes sufficient lab experiences to enhance your career preparation.*

1-14/36 (38.9%), 2- 17/36 (47.2%), 3- 5/36 (13.9%)

- Labs encourage creative thinking and to become accustomed to working as a team-very important.
- We had lots of hands on lab time, could have used more turf research.
- Labs were very useful-more is better in this case.

9. *The program coursework covered relevant information.*

1- 18/36 (50%), 2- 16/36 (44.4%), 3- 2/36 (5.6%)

- Half of the courses were relevant, some overboard but not to any fault.

- Most of our class work seemed to have been relevant.
- Although the Turfgrass class seemed more aimed at golf students.

10. The program includes sufficient instruction in oral and written communication.

1- 17/36 (47.2%), 2- 15/36 (41.7%), 3- 4/36 (11.1%)

- presentations seemed a bit informal-strive for professionalism.
- Communication classes were very good, English classes were tough academically but I survived.
- Not sure what this means.

11. The program courses were sufficiently challenging academically.

1- 20/36 (55.6%), 2- 14/36 (38.9%), 3- 2/36 (5.6%)

- Mr. Vanderploeg's classes were exciting at times, but his tests were very difficult, especially Plant Pathology.

12. Instructors seem interested in the academic progress of students.

1- 24/36 (66.7%), 2- 10/36 (27.8%), 3- 2/36 (5.6%)

- I've seen the instructors direct students toward study/ tutoring groups.
- Mr. Vanderploeg more than any other Instructor. He always seemed interested in our career plans, and our academics. He was always there when we had questions that we needed answered.
- If not for Mr. Vanderploeg's interest in me I would not have graduated.
- Professor Vanderploeg always seemed concerned/interested in students academic development.
- Very much appreciated.

13. As a student you received adequate advising.

1- 24/36 (66.7%), 2- 8/36 (22.2%), 3- 3/36 (8.3%), 4- 1/36 (2.8%)

- more than expected.
- Prof. Vanderploeg took interest in me as a student and as a person.
- Always there when I needed.
- Outside of program and considering the whole university I would grade that below average.

14. The internship was an important part of the program.

1- 27/36 (75%), 2- 6/36 (16.7%), 3- 3/36 (8.3%)

- My internship in Traverse City opened my eyes to future work in the area.
- Hands on experience is very important to this program.
- I strongly agree that my internship was a very important part of the program, I believe it creates a window of opportunity for future careers.
- Learned a great deal-great experience.

15. The program courses utilized enough "hands on" experiences.

1- 13/36 (36.1%), 2- 14/36 (38.9%), 3-5/36 (13.9%), 4- 3/36 (8.3%), 5-1/36 (2.8%)

- Would have liked more green house experience.
- There can never be enough hands on experience before leaving school, but this program covered quite a few different practical procedures and practices.
- Classes out on the campus were great, most of the labs were very helpful and interesting. However, I believe we could have done more experiments in the greenhouse.
- For a horticulture student interested in greenhouse or nursing crop production, Ferris did not have the facilities available to adequately prepare them for what is used in the industry.
- Yes, very much so! Really helped when going into the workplace.
- Our class was cut short with propagation because there was only Vanderploeg to teach so somethings were cut short or blended into and then rushed.
- Some more in the field work would be beneficial. Maybe have each class install a small landscape project.

16. Are you currently employed in the horticultural industry?

Yes 23/36 (63.9%) No 12/36 (33.3%) No Answer 1/35 (2.9%)

Yes

Danielle Ferris- working this summer at Frederick Meijer Botanical Gardens as a summer gardener.

Karen Dutescu - self employed, owner/manager/operator

Larry Dadgett- currently employed with Horticulture Services as a landscape supervisor.

Carrie Plude- Purpleleaf Nursery, Landscape Designer.

Dan Frank - works for Total Marketing Assoc. a marketing firm reps for about 50+ Lawn and Garden Companies only. Also worked 4 yrs. at Zelenka Nsy. and Turf Tech Landscape Design.

Micheal Titzer- Victoria National Golf Club, 2nd Assistant/Superintendent

Rita (Lasak) Seaberg - self employed, own and operate retail flower shop.

Mark Thibault - Ruffled Feathers Golf Club, DBA American Golf Corp., Asst. Golf Course Superintendent.

Bob Howard- Birchwood Farm Landscape Co., general manager

Shane Maciejewski - Franks Lawn and Tree Inc., Renaissance Nursery and Landscape Supply, Landscape Construction Foreman.

Frank Mondrella- owner of Mondrella Landscaping.

Kasey Thren - co-owner, president of K.T. Lawnscape.

Sharla Hicks- owner and manager of Shore Nursery.

Carl Parlove - Oakland University Golf Course, Greens Keeper V; mastery level

Unknown - Mistwood Golf course, golf course superintendent.

Randy Teichman- Crystal Mtn. Resort, head golf course superintendent.

J. Kelly - Zelenka Nursery, Eastern Michigan Sales

Paul Friedrich - Wal-Mart in Alpena as Lawn and Garden Dept. Manager.

Eric Wathen - owner of Custom Outdoors in Muskegon.

Janice Sztukowski- self employed, owner/operator of greenhouse/nursery

Scott Schultheis- Dow Gardens as Greenhouse manager.

Unknown- New Horizons Landscaping in B.R., retail manager/estimator.

Micheal Medema- Foremost Insurance and Development; landscape architect and grounds manager for their developing 500 acre office park.

No

William Fischer- long hours and commitment were not met equal with pay and made it hard to raise a family.

Kim Bradley- currently working on Bachelors degree in Horticulture at MSU.

Tom TerHaar - currently employed in the Environmental Graphic Design field.

Stacey Porman- substitute teacher and attending EMU in secondary education to teach 6-8th grade.

Scott Phelps - started own insurance agency.

Unknown- finishing bachelors degree in Business at DU.

Kyle Orr- was offered management position by previous employer.

Mitchell Taylor- currently working on B.A. in Horticulture at MSU.

Jeff Prather- currently employed by Florida Department of Environmental Protection.

Brian Johnston- currently employed elsewhere but still hold DBA for part-time business in landscape.

Unknown- low pay

Lori Morse- been kind of discouraged by other businesses in the industry who seem to not care if we have a degree or not.

17. What is the greatest strength of the Ornamental Horticulture program?

- Good instructors, good selection of classes for two year program.
- John Vanderploeg- his knowledge of the subject and his caring attitude.
- The courses that helped me the most were the soil sciences, plant physiology, and plant material ID. These were courses that taught principles outside of "ornamental topics".
- The great amount of individual attention that the student has the opportunity to utilize.
- The greatest strength is the knowledge and enthusiasm of professor Vanderploeg. The programs diversity and broad range of the differing areas of horticulture is also a great strength.
- Mr. Vanderploeg knows his stuff!
- Plant identification and knowledge about each.
- Landscape design and entomology.
- Its reputation throughout the industry.
- The greatest strength is the small classes. They offer one on one contact and make learning a lot easier. The plant ID courses are also very strong.
- The broadness of FSU program. We touched on subject matter that MSU's two year program doesn't.
- Good instructors who are knowledgeable and taught me a lot in a year and a half.
- Information gathered in the ID classes.
- I would have to say the "well rounded" curriculum which touches on the aspects of the industry which can be "book" taught, as well as the internship.
- Plant biology and physiology classes.
- For a landscaper it is the plant ID and communication classes- lecture class included.
- The program has a well rounded range of subjects and courses.
- Plant ID, plant knowledge.
- John V.!
- Its small class sizes and personal counseling. No surprises, the core classes are well defined. The program is interesting and taught by qualified instructors.
- The close attention to the students by the staff. Small class size, great professors.
- Instructors who take a very real interest in helping make your career a success.
- Turfgrass and plant ID depending on ones field.
- I found everything (mostly) to be very helpful for taking care of plants, and designing. The classes were very well taught.
- Plant ID
- Plant ID, Design 1,2, Botany, Internship, Turf Management
- Flower, tree, plant ID; at least in my field.

- Small classes with personal attention and the internship program.
- A well rounded core of classes. Excellent knowledge from Mr. Vanderploeg. And the labs because you learn more with hands-on experience.
- Available advisors was nice and important. The size of classes and the size of enrollment. Had great help from faculty- more than other dept. (Bus.)
- John Vanderploeg- he knows everything!
- John Vanderploeg is a motivated speaker with great respect and admiration of the landscape/horticulture industry. His enthusiasm is carried through his teaching.
- Great instructors, fun field trips, hands-on experience (when we got it), being outside.
- The greatest strength of the program is all the hands-on experience students are given. Also, the small size of the classes gives you lots of attention and allows professors to get to know you.
- I think the strength is in the student-teacher relationship. We got to know the professor on a day to day basis, too many colleges don't do that any more and I really felt that the professors really cared as to how we were doing.

18. What is the greatest weakness of the program?

- The botany class with Dr. Mitchell was not very good. Students should have a better understanding of how plants work.
- Soil science needs to be more practical.
- For myself, I was more interested in construction practices than management practices and I would say the program could use more education in landscape construction.
- The botany class needs to be restructured.
- Too broad of program. Could have covered same subjects in 4 yr. program.
- Not enough work with turfgrass.
- I can't think of one.
- More time to explain, breakdown each topic; why's and how's.
- Not enough hands-on in landscape construction techniques and equipment usage.
- When I was at Ferris computer Land cad was optional if we had time in evenings or between classes. I think it should have been mandatory.
- The period when I went through, it was the turf grass class and soil science. We received very little useful information. We did not look at or study lawns at all, we only went to a golf course once to look at the watering system.
- Soil science program.
- I would like to see the horticulture program as a 4 yr. bachelors program. There is still a lot I would like to learn.
- Under funded, needs more \$ to help advance the equipment in the labs.
- It possibly could have a bigger greenhouse.
- More related turf programs, along with practical hands-on experience.
- Business part of the industry; need to look at where the students will work. Where are the opportunities?
- A few classes cover such a wide range of info (to benefit landscapers to PGMers) some important topics and/or time is passed up.
- Could use more time out in the field identifying disease and insect damage.
- The lack of university support in staying current with industry practices and facilities.
- Greatest weakness while I attended (maybe this has changed) was having the same prof. for everything- you only got one view point and no other prof. to concur with.
- I think the program should be a solid 2 years of horticulture classes or projects.
- Being compared to MSU's program.
- The main weakness would be not having a larger greenhouse facility and outdoor garden area that could be used for teaching and lab projects.
- Lack of creative teaching methods in the soil science classes.

- Very little design instruction.
- That it is only offered as an associates program. I thought the lab was poor.
- In my opinion, the weakness is if a student chooses to specialize in any one area there are few avenues at Ferris to pursue those specialties. To increase the strength is to increase the number of options for students.
- Lack of facilities, especially a student greenhouse.
- The plant ID course, for example, is only targeted for plants in climate zones similar to Michigan. I moved down to Florida and could not use much of what I learned.
- That it is a broad program and only a two year course.
- Better equipment and greenhouse, would like to see 4 yr. program.
- Too many people in the industry and in the college take the program for granted, you only have to have a couple teachers to teach the whole program. I wish there was a way to get a bachelors in the program, cause I really don't feel I can do much with the associates.

19. Which of the core courses did you find to be of the least value to you as a graduate?

- Turf grass management-incorporate w/ soil science.
- The plant biology class.
- The design course. It doesn't apply to anything I do. However, I did learn valuable information from the course and can't wait until I buy a home so I can landscape the yard.
- I have found that there is something in all core courses that I have found useful.
- Of the core courses all are critical to a person who hopes to be regarded as a professional in the field of horticulture. I can only see that I least enjoyed the class dealing with entomology.
- Turf management, I didn't think the teacher was very good. I did not learn much in the lab.
- Insect classes-they were very interesting but not used very much.
- Soil sciences.
- The turf management course. It do not deal with turf that much and did not learn very much in the course. I am more interested in flowers than turf.
- They all came into play at one time or another.
- All have been quite beneficial in one way or another.
- Turf grass management.
- Each course I took at Ferris I am sure was of some value to me whether it actually aided in career development or not.
- Landscape design.
- Turf grass management; good class for golf or lawn care).
- I have used everything I learned at Ferris as Garden Center manager.
- Turf management-taught poorly by a poor instructor. This also was 8 yrs. ago.
- Most of my courses I used at one point in my career or another.
- I feel that they have all been of value.
- Small business mgt. Very important subject needs to be more individualized.
- All the courses were valuable if taught by the right professor.
- Soil science.
- All of the courses are valuable in one form or another. Though I may not use each one everyday, I use bits and pieces from week to week.
- All were valuable.
- Turf grass mgmt/ soil science; does not need to be so much into 10 week programs. Too much info, not put into practical uses.
- I think that depends on what your job is, with my job I don't really use the botany class-that's not a core class but that is the one class that I don't feel was necessary.
- I've probably used info. from every course I took, but I would say the soil science class was the least effective in my professional development.
- Soil science needs to be more practical.

- Seminar.
- All were equally important. I'm glad it wasn't watered down, just wish it could have given me a bachelors somehow.

20. Are there any courses not currently offered that you think would be a benefit in your employment?

- A separate class on Herbaceous plants, a class on propagation and/or production, a class on soils and explaining to soils when they are fertilized or amended.
- More greenhouse experience, but I guess you're covering that.
- An introduction of some sort to tools and equipment could be beneficial to a student who hasn't had experience previously (e.g. skid loaders, sod cutters, tillers, hand tools, grading equipment); this could be part of landscape construction class.
- The seminar class-may need more attention on real life on the job practices. Possibly take one week of each course and demonstrate day to day practices. Landscape design was a good course but propagation, soils, etc. how do these courses relate to horticulture business?
- More business management classes, for budgeting. More turf and soils courses.
- A class dedicated to just flowers. Annuals and perennials. Regular homowner gardening.
- More on chemicals, i.e. fungicides, insecticides, herbicides. Start to require a foreign language. I know in my area, Chicago, IL., majority of our labor force is Mexican. Luckily I had it in high school.
- I know, it would be hard to do, but maybe a course on equipment uses (hand-on) and maintenance (hands-on).
- Customer relations, dealing with problems they have; simulations.
- I would love more classes specifically aimed at greenhouse management and operations.
- More mgt. or turf classes, but a great program that helped me start my career.
- More turf classes, maybe one or two.
- I feel the program was very strong when I attended Ferris. However, I also feel that a stronger emphasis on turf management would help upcoming students.
- I feel the students should travel (field days) to more events. To a large Nursery, greenhouse, golf course, retail garden center, landscape project, etc. Show the students what horticulture field is all about.
- Construction management, how to competitively bid current rates on quality workmanship, heavy equipment.
- Landscape design.
- Specific courses I could not address. I do think however, that some could be expanded to a point where new classes could emerge and the entire program could become a 4 year degree option which may be more appealing to some-especially those considering MSU.
- Second class to the insect ID-some of the info in the entomology class was rather broad. More info associated with plant bugs.
- Another design course would be good and a hands-on installation project.
- I think a course dealing with tropical plant, vegetable, and fruit ID would be helpful. A floriculture class would also be beneficial. A horticulture business class would be good too.
- The use of plants throughout history/ historic periods.
- Design
- More landscape design classes and more ID classes for perennials and flowers.
- The only courses I can think of that would be of importance would be classes that concentrate more closely in certain areas. I realize the internship allows students to focus, but there are opportunities in Big Rapids for students to be more involved. For example, working rounds at the golf course or time you must work in the greenhouse, etc.
- More emphasis on greenhouse production. Some courses on fruit and vegetable ID and production and post harvest handling techniques.

- I think that courses taught currently are sufficient. Students are coming from the program with more than enough knowledge to compete and succeed in the horticulture related industries.
- Hands-on landscape installation, actually design and build a landscape.
- Classes in growing, or more time spent with growing experiments. Growing on a large scale-such as might be done in big facility.
- If I had a job in the industry I would have to say customer-client information consulting. Extend the design classes so that you can have more time to go through the CAD programs. We didn't really get into annual and perennial plants native to Michigan, I think a general ID in this area would be beneficial.

SECTION 4

EMPLOYER SURVEY

Employer Survey

The employer's survey follows this page. This survey was designed to determine employer's satisfaction with our interns and graduates. While the information provided was valuable, the somewhat limited response was due to the timing of the survey document, which arrived at a very busy time of the year. The information obtained will be used to further refine the program so employers will continue to seek out our graduates and interns.

Areas of concern include student's lack of certification as pesticide applicators and insufficient knowledge of plant installation procedures. These concerns are in the process of being addressed in the curriculum.

The employers gave our graduates good ratings in the areas of plant identification and general horticulture knowledge. Some employers felt that our graduates were better prepared than graduates of similar programs at other universities. Seventy percent of those that responded ranked the OHT program as very good and 100% indicated that they would hire another intern/graduate of the program.

Employers Perceptions of Interns and/or Employees

1. How would you rate Ferris State University's (FSU) Ornamental Horticulture Technology (OHT) graduates or interns? Excellent- 1/10 (10%), Very Good- 7/10 (70%), Good- 1/10 (10%), Fair-1/10 (10%).

2. In what area(s) does the intern/graduate seem to be well prepared?

- Plant materials, names of plants, understanding landscape projects.
- Plant ID, care and support of plants, construction ability.
- Plant ID, overall plant care and function of plant parts.
- My student was prepared but had a severe self confidence problem so I could not really tell where his strengths were.
- Plant ID good.
- Insect/pest ID, ability to lead people.
- General horticulture awareness.
- Knows trees very well, has a lot of practical knowledge, is trustworthy with equipment.
- General horticultural practices, some plant names.

3. In what subject(s) does the intern/graduate seem under prepared?

- Insects and diseases and their control early in the summer but by the end they have gained valuable knowledge. They are as prepared as interns from other schools.
- Design knowledge, plant placement, perennial names and varieties.
- Construction, reality of plant availability and install experience.
- Should have Michigan Commercial Pesticide Applicators Certification (from MDA).
- Able to correct grades, read a transit, problem solving.
- Doing what is right, not what is easiest.
- Actual planting of plants and correct installation practices, on site ID of diseases and weeds.
- Design ideas, design ability, sales, marketing, management.
- Job experience and lack of leadership.

4. Do FSU Ornamental Horticulture interns/graduates compare favorably with interns/graduates of other ornamental horticulture programs? Please explain your response?

- Yes
- I think they are well trained compared to other schools.
- About equal with MSU 2 yr. program.
- They seem to be a step above other schools. I think it is because the students are getting a broad education in design and horticulture.
- I'm sure they do but the one student I had needed to bring it out of himself.
- About the same.
- We have only had graduates from 4 yr. programs. These graduates seem to know more about crop scheduling and identifying nutritional problems. Interns are about equal.
- Yes

- Haven't had other interns up to this point. (Ferris student) is very willing to learn, good work ethic and attitude.
- Yes, they are highly motivated to learn all they can. They have a good understanding of horticultural practices and by the end of their internships their knowledge of insects and disease is quite good.

5. Would you hire another intern/graduate from the FSU Ornamental Horticulture Technology program?

100% Yes

- Without hesitation
- Yes, (ours) is willing to learn, has a good outlook on work.
- Yes, we have tried but have not seen many of your students come south lately.
- Yes but we haven't had anyone apply lately. We have asked for interns but there hasn't been any response.

6. Do you consider the internship to be an important part of a student's preparation?

100% Yes

- I think that the student learns as much in the internship as he/she does in the school setting in terms of practical knowledge.
- Definitely need hands duty experience.
- Yes, very very important.
- It must be explained to employer that it is a learning experience and should be moved around throughout a company.
- Yes, a valuable part.
- Very important
- A necessity
- Very much so!
- I believe it is, especially learning the plant materials on the job. Working with other people. Seeing their ideas being put to work and creating a nice landscape.

7. Should the internship be completed at the end of the curriculum or remain as it is between the two years?

2 said "either way" and the rest said "between".

- Between, they will learn more the 2nd year as to what really applies.
- Either way-It would be helpful for the students to have the plant ID classes before the internship. We do realize though that there is only so much class time.
- It is best between the 2 years. This gives the student some good exposure to see if this is really what he wants in a career.
- I would leave it between the 2 years to give students time to switch their focus if they find they do not enjoy their internship experience. We have been happy with their preparation and find the insect and disease collection project beneficial to the entire grounds staff.

8. Should OHT graduates be given instruction on equipment operation?

29

- A basic understanding of equipment maintenance and operation would be nice but we feel it is important to teach the interns about our own equipment and its proper maintenance so they would receive that training here.
- General principles would be good. Specifics would be taught on the job.
- No, waste of class/field time
- Yes, standard transmission!
- Yes
- Yes, equipment is important in business, get the students more valuable to hire.
- It would help but it is not necessary.
- Yes, it is now law on high/low, etc.
- No, all equipment is different.
- It would be helpful, necessary though?
- It's probably going to be hard to train students on equipment at the university. It doesn't take long to train them on site, using the equipment on the job is very good experience.

9. *Have students been prepared in subject areas that are relevant to employers?*

- Yes (5)
- The students will face the practical application when they start to work. They have the head knowledge, but the practical take time.
- Yes. We are very pleased with our graduate. She is learning more and more everyday, and hopes to obtain her bachelors degree.
- Need more computer skills also.
- They should take more field trips to a company that pertains to what they are studying.
- Practical knowledge is very important.

10. *Have you referred potential students to this program?*

Yes-6, No-2, Not yet-3

SECTION 5

**BIOLOGY FACULTY PERCEPTIONS OF THE
ORNAMENTAL HORTICULTURE TECHNOLOGY
PROGRAM**

Biology Faculty Perceptions of the OHT Program

Overall, the faculty in the department support the OHT program. However, there are some concerns regarding the overall commitment to the program by the administration. This is primarily due to the restructuring which resulted in the downsizing of the program from two to one full time faculty member. The program now relies on one full-time faculty member who also needs to teach overloads each semester due to the inability to attract qualified professors to teach in the program on a part-time basis. This situation discourages the program coordinator from taking a sabbatical leave, or to engage in other professional development activities. Release time granted to the program coordinator should be increased to .25 FTE/semester to more adequately reflect the responsibilities of this position and to make it equivalent to release time given to other program coordinators on campus. The addition of a new greenhouse is long overdue and must be obtained in the very near future to ensure the growth and vitality of the program.

BIOLOGY FACULTY PERCEPTIONS OF THE ORNAMENTAL HORTICULTURE PROGRAM

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Unknown
1. The Ornamental Horticulture Program is consistent with the FSU Mission Statement.	92.2%	7.1				
2. The Program is consistent with the objectives and goals of the Biology Department.	92.9%	7.1				
3. The Biology Faculty support the Program.	92.9%	7.1				
4. FSU Administration supports the Program.	7.1%	14.3	28.6	21.4	14.3	14.3

Please comment below on any of your responses.

Biology Faculty Perceptions of the Ornamental Horticulture Program

- 1) ***The Ornamental Horticulture Program is consistent with the FSU Mission Statement.***
Strongly Agree- 13/14 (92.9%), Agree- 1/14 (7.1%)

2. ***The Program is consistent with the objectives and goals of the Biology Department.***
Strongly Agree- 13/14 (92.9%), Agree- 1/14 (7.1%)

3. ***The Biology Faculty support the Program.***

Strongly Agree- 13/14 (92.9%), Agree- 1/14 (7.1%)

4. ***FSU Administration supports the Program.***

Strongly Agree- 1/14 (7.1%), Agree- 2/14 (14.3%), Neutral- 4/14 (28.6%), Disagree- 3/14 (21.4%),
Strongly Disagree- 2/14 (14.3%), Unknown- 2/14 (14.3%)

Comments:

- The administration cut the faculty in half during downsizing. We are "making do" with part-time faculty and have no turf specialist as a result. Our program and the PGM program deserve a qualified, full-time turf specialist in Ornamental Horticulture. The SCH/FTE data surely supports this return to quality.
- This is an excellent program which serves a unique niche in the world of higher education. John Vanderploeg has done a tremendous job but he is vastly overburdened. The administration should support this program more strongly. Another contributing faculty member who could serve this and other programs is needed.
- Decreased number of faculty for the program from 2 to 1, decreased course offerings at the same time as decreased no. of faculty in program, still no upgrade of the greenhouse, FSU has money for golf course practice holes, new clubhouse, new irrigation system, etc. but still no new greenhouse!
- From everything that I've heard or seen, OHT is a great program. Unfortunately, it's basically a one-man show. This is a precarious way to run a program. Why doesn't the administration devote the necessary resources to build up the enrollment and increase the faculty involved in the program? It could start by really supporting the construction of a large greenhouse, which I think is essential for this program. A nice facility would be a highly visible way of showing the public and potential students how FSU supports its programs. You build a nice football stadium to show support for the football team in order to help recruit players. Why is it any different with students wanting to enter a particular program? I'm amazed that John is able to get any students at all with the limited facility he has.
- This is a great program administered by a superb program director. I'm not sure if it gets proper administrative support from the Dept. Head.
- A great program with effective leadership. It's unfortunate that in the Popovich downsizing the OHT program was hurt. We need a second OHT faculty member to assist John V. More time (release) needs to be given for recruiting.
- The program provides associate and bachelors (in Business) degrees with job training for a necessary field. The students are well trained to work in the field. The major is considered to be a real asset to the Department and the University by the faculty. I often recommend the field to students who are searching for a job training curriculum. The administration cut back the faculty in the area from two

- to one professor. This put a tremendous load on the one professor and spreads him very thinly over the courses. Also, the students do not get benefit of a second persons ideas and interpretations. The program desperately needs the completion of the greenhouse renovations to effectively conduct the class in the program. It should have been done with the building remodeling.
- The program needs to return to another person besides John to help with his teaching load. John does an excellent job, despite his overloaded schedule. What would happen if something like an extended illness were to occur? Would the program be able to continue?
- It would be nice to see the administration spend more money on increasing the number of full-time faculty teaching in this program and increasing the size of the greenhouse facility.

SECTION 6

**PROGRAM FACULTY PERCEPTIONS OF THE
ORNAMENTAL HORTICULTURE TECHNOLOGY
PROGRAM**

Ornamental Horticulture Faculty Perceptions of the OHT Program

The faculty that are involved in either full-time or part-time instruction in the OHT program were surveyed to determine their attitudes. The four faculty responded to the questions indicated on the following pages. Overall, the faculty are supportive of the way the program is structured and the role it plays in preparing students for employment in the horticulture industry. A few of the major concerns include the lack of sufficient qualified personnel and insufficient supplies and equipment funds. There needs to be an increase in the student wages allocated to the OHT program for the maintenance and care of the greenhouse collection. This will be more important when we acquire the new greenhouse. Additional concern exists for adequate storage space and existing greenhouse facilities. Program faculty do not always feel the support of the department and college. The program hopes to correct these concerns through the construction of a new greenhouse and the addition of one full-time faculty member.

**ORNAMENTAL HORTICULTURE FACULTY PERCEPTIONS OF THE
ORNAMENTAL HORTICULTURE PROGRAM**

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Unknown
1. The Ornamental Horticulture Program is consistent with the FSU Mission Statement.	100%					
2. The Program is consistent with the objectives and goals of the Biology Department.	100%					
3. The Biology Faculty support the Program.	25%	50				25
4. FSU Administration supports the Program.	25%		25	25		25
5. The Ornamental Horticulture Program offers students an opportunity to pursue academic, technological and practical excellence.	75%	25				
6 The program trains students in current technological and practical skills needed for success.	100%					
7. The program courses are arranged in a logical sequence from least expertise required, to greatest expertise required.	75%	25				
8. The program offers sufficient opportunity for students to develop good oral and written communication skills.	25%	75				
9. The program offers sufficient opportunity for students to develop critical thinking and problem solving skills.	25%	75				
10. The program offers sufficient opportunity for students to master a broad knowledge of the major areas of biotechnology, in reasonable depth.	75%	25				
11. The program responds to the needs of a growing industry.	75%	25				
12. The program is limited by the lack of sufficient qualified personnel.	100%					

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Unknown	Average
13. The program is limited by lack of sufficient budget.	50%	50					
14. The program is limited by lack of sufficient equipment.	75%	25					
15. The program is limited by lack of sufficient storage space.	75%	25					
16. The program is limited by lack of sufficient recruitment.	50%	25				25	
17. The program is limited by lack of							

Please comment below on any of your responses.

Ornamental Horticulture Faculty Perceptions of the Ornamental Horticulture Program

1. The Ornamental Horticulture Program is consistent with the FSU Mission Statement.

Strongly Agree-4/4 (100%)

2. The Program is consistent with the objectives and goals of the Biology Department.

Strongly Agree- 4/4 (100%)

3. The Biology Faculty support the Program.

Strongly agree- 1/4 (25%), Agree-2/4 (50%), Unknown-1/4 (25%)

4. FSU Administration supports the Program.

Agree- 1/4 (25%), Neutral- 1/4 (25%), Disagree- 1/4 (25%), Unknown- 1/4 (25%)

5. The Ornamental Horticulture Program offers students an opportunity to pursue academic, technological, and practical excellence..

Strongly Agree- 3/4 (75%), Agree- 1/4 (25%)

6. The program trains students in current technological and practical skills needed for success. Strongly

Agree- 4/4 (100%)

7. The program courses are arranged in a logical sequence from least expertise required, to greatest expertise required.

Strongly Agree- 3/4 (75%), Agree-1/4 (25%)

8. The program offers sufficient opportunity for students to develop good oral and written communication skills.

Strongly Agree- 1/4 (25%), Agree-3/4 (75%)

9. The program offers sufficient opportunity for students to develop critical thinking and problem solving skills.

Strongly Agree- 1/4 (25%), Agree- 3/4 (75%)

10. The program offers sufficient opportunity for students to master a broad knowledge of the major areas of horticulture, in reasonable depth.

Strongly Agree- 3/4 (75%), Agree- 1/4 (25%)

11. The program responds to the needs of a growing industry.

Strongly Agree- 3/4 (75%), Agree- 1/4 (25%)

12. The program is limited by the lack of sufficient qualified personnel.

Strongly Agree- 4/4 (100%)

13. The program is limited by lack of sufficient budget.

Strongly Agree- 2/4 (50%), Agree- 2/4 (50%)

14. The program is limited by lack of sufficient equipment.

Strongly Agree- 3/4 (75%), Agree- 1/4 (25%)

15. The program is limited by lack of sufficient storage space.

Strongly Agree- 3/4 (75%), Neutral- 1/4 (25%)

16. The program is limited by lack of sufficient recruitment.

Strongly Agree- 2/4 (50%), Agree- 1/4 (25%), Unknown- 1/4 (25%)

17. The program is limited by lack of _____.

- Greenhouse facility
- Departmental and college support.

- Larger greenhouse
- Exposure.

Additional comments:

- More money needs to be spent on a full time faculty position so that recruitment can be accomplished. It is my understanding that graduates in this program are in high demand. Graduates can expect a salary of about \$25-30,000 per year. If more time was spent on recruitment we would have no difficulty doubling or tripling the program.
- Lack of greenhouse facility is a major drawback to the present size of this program, and a possible increase. It would be more difficult to recruit given the present size of our greenhouse.

SECTION 7

**STUDENT PERCEPTIONS OF THE
ORNAMENTAL HORTICULTURE TECHNOLOGY
PROGRAM**

Students Perceptions of the OHT Program

All students enrolled OHT curriculum were surveyed to determine their opinion of the program. Their responses to a number of questions are recorded on the following pages. Since these students are actively pursuing their degree, their comments concerning the program are particularly relevant. They expressed concern that the greenhouse and related storage facilities are inadequate for this program. Some students felt that there was not sufficient coverage in each course taught. This is somewhat a reaction to the broad-based approach that the program takes.

Overall, the students were very supportive and complimentary of the faculty. They also seem to enjoy the hands-on approach to instruction. They expressed concern about having one faculty member responsible for teaching so many of their classes. Students suggested that the program should be expanded to include additional course offerings. These concerns will be directed to the department head and the dean of the college.

OHT STUDENTS PERCEPTIONS OF THE ORNAMENTAL HORTICULTURE PROGRAM

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. The courses in the OHT Program follow a logical progression	23.8%	71.4	4.8		
2. The Program provides sufficient coverage in each of the courses.	19%	66.7	14.3		
3. The Program courses are taught by qualified faculty.	52.4%	47.6			
4. Program courses do not have excessive amounts of repetition.	4.8%	76.2	14.3	4.8	
5. The Program provides information that you would consider valuable to your education.	61.9%	38.1			
6. The program utilizes sufficient lab experiences to enhance your education.	33.3%	47.6	14.3	4.8	
7. Program courses are taught in surroundings that are conducive to learning.	23.8%	61.9	14.3		
8. Program courses cover relevant information.	33.3%	57.1	9.5		
9. Program courses are sufficiently challenging academically.	57.1%	42.9			
10. Instructors seem interested in the academic progress of students in the program.	33.3%	61.9	4.8		
11. As a student in the program you have received adequate advising assistance.	33.3%	52.4	14.3		
12. The internship is an important part of the Program.	42.9%	38.1	19.0		
13. The facilities and equipment seem adequate for this Program.	4.8%	47.6	14.3	23.8	

14. Are you in your (first year) or (second year) of the program. Circle one
 Provide the grade average that you are maintaining in the program. _____

15. What is the greatest strength of the Ornamental Horticulture Program?

16. What is the greatest weakness of the program?

16. Which course would you consider least valuable in the Program? Why?

Please comment below on any of your responses or any additional observations that you might have. It is of great importance to provide explanations of the responses in items 1-13 above.

OHT Students Perceptions of the Ornamental Horticulture Program

1. The courses in the OHT Program follow a logical progression.

Strongly Agree-5/21 (23.8%), Agree-15/21 (71.4%), Neutral-1/21 (4.8%)

- It flows very well course to course.

2. The Program provides sufficient coverage in each of the courses.

Strongly Agree- 4/21 (19%), Agree-14/21 (66.7%), Neutral- 3/21 (14.3%)

- Have not had all courses yet so I do not want to comment.
- Insect Pest Mgmt. Was insufficient. We were collecting and identifying insects before we knew what they looked like. We didn't see what types of damage was done.
- Once in awhile we miss something I wanted to learn, then others I learn more than I wanted.

3. The Program courses are taught by qualified faculty.

Strongly agree- 11/21 (52.4%), Agree-10/21 (47.6%)

4. Program courses do not have excessive amounts of repetition.

Strongly agree- 1/21 (4.8%), Agree-16/21 (76.2%), Neutral- 3/21 (14.3%), Disagree-1/21 (4.8%)

- They try not to repeat information unless they have to from course to course.
- Some times repetition is good to keep us on our feet.

5. The Program provides information that you would consider valuable to your education.

Strongly agree-13/21 (61.9%), Agree- 8/21 (38.1%)

6. The program utilizes sufficient lab experiences to enhance your education.

Strongly agree- 7/21 (33.3%), Agree- 10/21 (47.6%), Neutral- 3/21 (14.3%), Disagree-1/21 (4.8%)

- More lab experiments in some courses but other wise its great.
- It would be nice to do a few extra labs.

7. Program courses are taught in surroundings that are conducive to learning.

Strongly agree- 5/21 (23.8%), Agree-13/21 (61.9%), Neutral- 3/21 (14.3%)

- Some air ducts are way too loud-building's fault, not prof.

8. Program courses cover relevant information.

Strongly agree- 7/21 (33.3%), Agree-12/21 (57.1%), Neutral- 2/21 (9.5%)

- I've learned tons and I can use it.
- Sometimes things are too technical

9. Program courses are sufficiently challenging academically.

Strongly agree-12/21 (57.1%), Agree-9/21 (42.9%)

- It's the matter of applying yourself.

10. Instructors seem interested in the academic progress of students in the program.

Strongly agree- 7/21 (33.3%), Agree-13/21 (61.9%), Neutral- 1/21 (4.8%)

- Yes, I have seen some interest.

11. As a student in the program you have received adequate advising assistance.

Strongly agree- 7/21 (33.3%), Agree-11/21 (52.4%), Neutral- 3/21 (14.3%)

- Yes, main thing is to ask for it. That makes it easier.

12. The internship is an important part of the program.

Strongly agree- 9/21 (42.9%), Agree-8/21 (38.1%), Neutral- 4/21 (19%)

13. The facilities and equipment seem adequate for this program.

Strongly agree-1/21 (4.8%), Agree-10/21 (47.6%), Neutral-3/21 (14.3%), Disagree-5/21 (23.8%), Strongly disagree-2/21 (9.5%)

- I think the greenhouse should be bigger so the students can accomplish more and better experiments. Also they can see more plants.
- It's not like State's but it will do.
- The greenhouse needs to be larger and updated.
- We need a larger greenhouse plus for design it would have been helpful if drawing tables provided. The tables currently in the room should be replaced with more adequate facilities.
- We need a larger, better equipped greenhouse.

14. Are you in your first or second year of the program and what is your average grade?

1st year: 14/21 (66.7%), 2nd year: 5/21 (23.8%), 2 didn't answer.
Average GPA: approx. 2.63

15. What is the greatest strength of the Ornamental Horticulture Program?

- Each course or class has a great deal of information to learn and all of it is necessary to know for a complete education.
- The hands-on learning in the course. This approach helps the students take what they are learning in the class and put it to use so they know the information in the class is really important.
- The background of the instructors. The quality not quantity of the program.
- The knowledge of the professors.
- I feel the program's greatest strength is its teachers. All seem to be knowledgeable in the field.
- The small numbers in the class is a good strength. Everyone gets a chance to ask questions, if needed. Also everyone knows each other and we all seem to work together well.
- The instructors who try to help the students as much as possible and make sure all of the important points are covered.
- I think the greatest strength is the knowledge of the teachers in the program. They all are very prepared in the instruction and I think really relate to most of the students. They are able to answer your questions and take full pride in their jobs.
- I would say the greatest strength is the knowledge the instructors bring. All the instructors I have had have impressed me with their expertise.
- I think the greatest strength would have to be the hands-on experience by going out on the grounds of Ferris to learn outside instead of inside. I also think the instructors vast knowledge of the subject is a key component to the success of the students.
- The greatest strength of the OHT program is a knowledgeable, interesting and advising professor, which has been supplied by FSU.
- The plant ID courses because they show us a lot of different plants that we will likely use on the job.
- I believe the greatest strength of the OHT program is our ability to go outside for our labs and look at what we are studying in the classroom.
- I like having the labs because of the hands-on experience. Its not just all writing and pictures in books, which is helpful and more enjoyable.
- It challenges me to know everything about the field. I am able to apply what I've learned in a practical manner. The hands-on experience is invaluable.
- The greatest strength is the instructor who seems to know everything about the subject.
- The greatest strength of OHT program I think is the small class size and hands-on experience.
- What I believe to be the greatest strength of the program is its coverage of information provided to the students. The OHT program provides plenty of information regarding the program. Also the hands-on portion of the program. What we learn in class, we interpret out in the field which makes and shows you what you've actually been taught.
- The fact that the teachers are very skilled in their specific areas. Most of the teachers in our program have been here for a long time and have the experience it takes to show in their teaching that they actually know what they are talking about.
- Ornamental Horticulture program to me has great strength in being able to go into the fields and basically learn form what you're studying rather than sitting in the classroom viewing slides or sitting through lecture.

16. What is the greatest weakness of the program?

- I feel some of the courses should be offered at different time or more than one course offered so you don't have to wait around for a class one semester or possibly two.
- The availability of a well-equipped greenhouse and other equipment that would be necessary in order for the students in our program to get the hands-on experience that we are looking for. If we have such a good program-we should have the facilities to prove that.
- I don't really see a huge weakness within the program, maybe the grading could be a little more lenient but I guess that could be for our own good, huh?
- The weakness of the program I would say lies in the growing aspect of OHT, it doesn't seem like there is a lot of depth in this area. I would like to see some greenhouse crop production and maybe some crop science classes offered.
- Very small amount of people (I like this myself but I would consider it a weakness)
- Not enough time can be devoted to particular issues. If the program were a bachelors program, I feel more time would be available for the students to better absorb the amount of info necessary.
- I guess the only thing that I haven't liked so far is parts of the program that are directed toward greenhouse production since I am going to be constructing landscape and will probably never use this information.
- The greatest weakness is the size. I wish the program was larger because then maybe the classes could be taught by two teachers each semester and you would have your choice. This would allow more electives to be taken.
- Not having a sufficient greenhouse, it should be a lot bigger so it can hold flowers that we need to learn. It would be nice to be able to touch and see them instead of looking at pictures.
- Insufficient information to time being, I haven't witnessed a weakness.
- I think the greenhouse facilities can be greatly improved. There are many advantages for the students in having a well rounded greenhouse and as it is now the greenhouse does little help to the students in this program.
- I would say that the greenhouse situation needs to be improved. I think OHT students should be involved in Campus landscaping also.
- I think the greatest weakness may be that there is not enough hands-on experience. We never really get to learn by doing. What I mean is there should be a chance for us to actually do some landscaping around campus. Also another weakness is of the flower portion of plant ID 2. We study all flowers by slide, we do have a greenhouse, why are none of the flowers we study in there? It could be done better.
- Poor facilities-when working in the greenhouse with 15-17 students it is difficult to carry out the tasks.
- I wish they had specific courses according to what kind of job the student wants in horticulture. For example, if you want to go into landscape design, have specific classes for that. Then you wouldn't have to take the other classes that don't apply. We also need more hands-on learning. Looking at pictures instead of the real thing doesn't cut it.
- Greatest weakness of the program is that we need a new greenhouse. If we had more hands-on and application experience in labs. With a greenhouse you can have so much more of an understanding of how this business works. No question about it.
- Funding. This program needs a much larger greenhouse and better facilities to keep up with the trends in the science of horticulture.
- The greenhouse.
- Some labs-like actually building a small scale model of a greenhouse or putting on glass/plastic of it to see how that works. To small of a greenhouse. More study labs in greenhouse with plants. We might need a few more instructors to help split the load of classes.

- The greatest weakness of the program is that they glide over some information because of the 2 yr. time limit of the program. They should make it a four year and actually prepare students for the new horticulture jobs that are being created everyday.
- The greenhouse is too small to achieve adequate information and results on experiments performed.

17. Which course would you consider least valuable in the program? Why?

- Pest management, I felt he spent too much time on how to identify the insects. I think more time should be spent on what problems they cause.
- I have not had any experience with a non-valuable class yet, but I am only a first year student.
- Don't have a least valuable course, all work great together.
- Basic botany, we cover all we need to know in the other classes required.
- None that I have come across.
- Turf grass management because that doesn't have much to do with what I want to do in my career. It does apply to other students though.
- Seminar (Hort 250) because I see no real value in it. It could be replaced with a communications course, which is required by most other programs.
- I think that maybe the soil class is least valuable. I think you could cover the more important parts in another class. Also the pest field study. Should be made as an assignment, not for credits. Credits are expensive and if there is no school teacher-student interaction why should a student pay?
- Insect pest management. I think the course should be more on prevention and control rather than identification.
- I think each course is valuable to the entire program, each gives the student something to build on to further their education toward horticulture.
- I believe the internship is for me because I have a sufficient 4 year background on public and country golf courses as part of the grounds crew and landscaping. I believe if you can provide information on past work history you shouldn't have to intern.
- Botany, because that class didn't teach me anything, and Dr. Mitchell put me to sleep.
- I think that the basic botany class is the least valuable. Everything we learned in the class is also taught to us in every one of our classes but I guess it is good to have a background.
- I think that all of the classes are valuable so that the student has a better idea of what avenue they would like to pursue with their degree.
- Seminar
- Every class I have had so far seems relevant to the program.
- Botany-I realize classes sometimes are boring but that class really put me to sleep and I learned basically the same things I learned in sixth grade.
- The math classes-I feel one basic math class is feasible for what you need in a two year program, it would also give us more time to take a Hort. class.

SECTION 8

**ADVISORY COMMITTEE PERCEPTIONS OF THE
ORNAMENTAL HORTICULTURE TECHNOLOGY
PROGRAM**

Advisory Committee Perceptions of the Ornamental Horticulture Technology Program

The advisory committee is made up of individuals that represents0 the different career tracks found in the industry. The advisory committee perceptions and the unedited comments of this group are found on the following pages. This survey does reveal a concern for the program's support facilities. Sixty percent of the committee indicated that the facilities and equipment are inadequate to provide quality education. The comment section indicates that this low rating is due to insufficient greenhouse space. The committee felt strongly that the program is understaffed, and that the teaching responsibilities of the program coordinator must be balanced with the administrative duties. The advisory committee believes that the demand for graduates is strong and that this program provides a valuable service to the horticulture industry.

ADVISORY COMMITTEE PERCEPTIONS
OF THE ORNAMENTAL HORTICULTURE TECHNOLOGY PROGRAM

The Ornamental Horticulture Technology Program Review Panel would appreciate your candid responses to the following questions. Please circle the response that most closely represents your opinion.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Unknown
1. The program is academically sound.		100%				
2. The program is technologically sound.		20%	20%	40%		20%
3. The program is administered effectively by the University.		40%	20%	40%		
4. The facilities and equipment are sufficient to support quality education.				40%	60%	
5. The program is staffed adequately.					100%	
6. The advisory committee plays an important role in directing the program.		60%	40%			
7. The advisory committee should meet more often to adequately guide the program.		40%	40%	20%		
8. The program meets the expectations of the industry.	40%	40%	20%			
9. The program provides sufficient coursework to adequately prepare students for employment.	20%	80%				
10. The program includes sufficient instruction in oral and written communication.	20%	80%				
11. The program performs a valuable service to the industry.	100%					
12. The demand for graduates from the program is strong.	100%					

Any questions that you wish to answer more completely or any other responses you may have can be recorded on the back of this form.

Advisory Committee Perceptions of the Ornamental Horticulture Technology Program

1. The program is academically sound.

Agree- 5/5 (100%)

2. The program is technologically sound.

Agree- 1/5 (20%), Neutral- 1/5 (20%), Disagree- 2/5 (40%), Unknown- 1/5 (20%)

3. The program is administered effectively by the University..

Agree- 2/5 (40%), Neutral- 1/5 (20%), Disagree- 2/5 (40%)

4. The facilities and equipment are sufficient to support quality education.

Disagree- 2/5 (40%), Strongly Disagree- 3/5 (60%).

5. The program is staffed adequately.

Strongly Disagree- 5/5 (100%).

6. The advisory committee plays an important role in directing the program.

Agree- 3/5 (60%), Neutral- 2/5 (40%).

7. The advisory committee should meet more often to adequately guide the program.

Agree- 2/5 (40%), Neutral- 2/5 (40%), Disagree- 1/5 (20%).

8. The program meets the expectations of the industry.

Strongly Agree- 2/5 (40%), Agree- 2/5 (40%), Neutral- 1/5 (20%).

9. ***The program provides sufficient coursework to adequately prepare students for employment.***

Strongly Agree- 1/5 (20%), Agree- 4/5 (80%).

10. ***The program includes sufficient instruction in oral and written communication.***

Strongly Agree- 1/5 (20%), Agree- 4/5 (80%).

11. ***The program performs a valuable service to the industry.***

Strongly Agree- 5/5 (100%).

12. ***The demand for graduates from the program is strong.***

Strongly Agree- 5/5 (100%).

Comments:

- Program needs a greenhouse facility to aid in labs and teaching. Students do not get a good base knowledge of greenhouse growing because of poor facilities.
- Program needs a second full time faculty. When I graduated from this program in 1987 we had two full time faculty. It is a need for proper instruction and advising.
- Graduates from this program can move into many different areas of employment. Opportunities are endless and wages with experience can be competitive. The industry is thirsting for knowledgeable people.
- A staff of one FTE is woefully inadequate. The replacement of the greenhouse is a good start. Replacement of the second FTE would enhance, embellish, and add quality to the education of OHT program. Placement of graduates in industry speaks well of the program. Program is good and solid, could be even better with better facilities and technical tools of the industry.
- John is running a one-man show. He is understaffed and overworked. He could use more help with teaching, recruiting. Needs more technology to stay on top of the industry. (Greenhouse) Number of students could be increased due to add greenhouse space. Add a new class or labs. Good program that puts out great students for a 2 yr. program. As a committee member I am not sure the role as a member. Would enjoy working with students, guest speakers.
- I believe the addition to the production greenhouse facility is necessary to bring the technological aspect of the program up to industry standards. Hands-on experience with the plants is a very important aspect of any students education. It would be very valuable to expand the staff to cover classes if John Vanderploeg is required to be elsewhere for any reason.

**ORNAMENTAL HORTICULTURE TECHNOLOGY
ADVISORY COMMITTEE
1999**

**Andrew Archer
New Horizons Landscaping
15433 220th Ave.
Big Rapids, MI 49307
616.796.0925**

**Gary Bateman
Katke Golf Course
West M-20
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**Greg Helsen
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**John Meyer
Grand Traverse Resorts
6300 U.S. 31 North
P.O. Box 404
Acme, MI 49610-0404
616.938.9083**

SECTION 9

LABOR MARKET ANALYSIS

Labor Market Analysis

Employment opportunities, in the horticulture field, continues to far outpace the number of qualified employees. This is the number one concern of employers. They feel that their opportunities to grow as small businesses will continue to be limited by the availability of trained personnel. As a result of this labor shortage, salaries continue to increase. On the average, students who graduate with the AAS degree can expect to receive salaries in the \$24-28,000 range. Students who continue their education and receive a Bachelor's degree receive even higher salaries. These salary figures represent starting wages. With more experience and years of service with a company, their salaries can climb substantially. On the following pages are listed job opportunities that appeared in one issue of the official publication of the Michigan Nursery and Landscape Association. This represents only a portion of the total employment postings that are received by the program each year. We usually have listings on over two hundred jobs, either internships or full time employment. Employers are often discouraged by the limited number of job applicants. With so many opportunities, graduates of this program can have their pick of employment.

Job Placements * Job Placements

MNLA annually offers firms the opportunity to list their job openings for the upcoming season. The resulting Job Placement Section is distributed to students throughout Michigan and beyond.

Service Oriented Nursery & Garden Center

Seeking experienced people to fill the following full time positions:

- Landscape Designer/Sales
- Retail Sales Specialist/Grower

Must have plant knowledge with computer, communication & leadership skills. We offer a flexible schedule and competitive wages with benefits. Internships available. Send resumé to:

Barrett's Garden Center
Home & Garden Showplace
1033 W. Beecher
Adrian, MI 49221

Plug Grower — Due to expansion and advancement, C. Raker & Sons is looking for an entry level Growers to join our Production Team. Ideal candidate will have hort. education and/or two years growig experience. We offer health and dental insurance, 401K, and a gainsharing plan. Raker's is a wholesale grower of high quality annual and perennial plugs, and an industry leader in innovation and technology. We also have internship opportunities. Contact Head Grower Mark Sanford at:

C. Raker & Sons
10371 Rainey Rd.
Litchfield, MI 49252
FAX: 517-542-2565

FIELD SCOUT

AG Chemical Distributor seeks seasonal field scout for vegetables, nursery, orchard and row crops. Qualified person must have some AG background and desire to learn. Reliable transportation and neat appearance a must.

Contact: Wilbur-Ellis Co.
Kent Hughes, Manager
1-800-866-2194

Ray Wiegand's Nursery, Inc.

Wiegand's is one of the fastest growing nurseries in the industry. We offer a wide variety of shrubs, trees and specialty items, guaranteed to give you a learning experience. The following positions are available in our re-wholesale yard.

- * Summer Internship
- * Full-Time Position
- * Part-Time Position

Please fax or send resumé to:

Ray Wiegand's Nursery, Inc.
47747 Romeo Plank
Macomb, MI 48044
Phone: 1-800-955-3658
Fax: 1-810-286-3650

Bordine Nursery, a well established and growing nursery and garden center with locations in Rochester Hills and Clarkston offers positions throughout the year in retail and plant production. Training exists for non-degree personnel. Full-time, part-time and seasonal positions are available. Bordines offers a comprehensive insurance benefit package, 401k, profit sharing and competitive wages. Send resúmes to:

Human Resources
Bordine Nursery
1835 S. Rochester Rd.
Rochester Hills, MI 48307
or
8600 Dixie Hwy.
Clarkston, MI 48348

Horticulture Internship - Summer 1999

The Birmingham Country Club is looking for a student interested in learning about the horticultural aspects of golf course management. Please contact Martha Wright at (248) 644-6320.

C.A.T. Services, Inc., Trenton, MI

Landscape Maintenance company needs career minded individual to help with day to day field operations and customer relations. We are ready to grow, we just need your help. Call (734) 676-1878 or Fax resumé (734) 671-3412.

Lawn and Tree Customer Service Specialist

Join one of the most honored lawn and tree application firms in the country. Located in northeast suburban Detroit, Arwood LawnCare, Inc. has been serving customers since 1970. Winner of several awards for professionalism and environmental awareness, Arwood has enjoyed significant growth over the past 10 years. We are looking for positive, self motivated individuals who want to add to our success while insuring their own success. Internships and full time positions available. We offer the highest wages, good benefits and a great work environment. Our application equipment is state of the art and we use the best materials to give our customers the best possible results for their landscape. You can learn more about us at www.arwoodlawncare.com. If you are the one we are looking for, contact Tim Doppel at 1-800-289-6635. Let's grow together.

Employment opportunities for the 1999 season with one of the premiere landscaping design/build firms in the Mid-Michigan area. Contact Bay Landscaping at (517) 893-4553 or Fax (517) 893-2421.

!!!COME JOIN A LEADER!!!

Chas. F. Irish Co., an industry leader since 1910 in arboriculture, all phases of landscape construction and maintenance seeks hard-working, highly-motivated, bright, intelligent individuals.

!!!JOIN THE PROFESSIONALS!!!

EXPERIENCED: or desire to learn the trade. Michigan CDL driver's license preferred.

- ARBORIST - to assist owner with site evaluation, estimating, supervision. Degree preferred.
- FOREMEN AND CREW MEMBERS FOR:
 - Landscape Construction: planting and related work.
 - Landscape Maintenance: mowing, gardening, tree & shrub pruning.
 - Tree Climbers & Trimmers.
 - Certified Pesticide Applicators: 3A, 3B

Apply in person or send resume to:

Chas. F. Irish Co.
24900 Groesbeck Hwy.
Warren, MI 48089
(810) 775-6600

Internships for landscape installation & maintenance: full time summer student positions; garden center sales; foreman trainee; irrigation service technician. Established progressive company - full benefits. Contact Roy Gingrich at Harder & Warner Inc., Caledonia, MI 616-698-6910.

Berns

Excellent opportunity to join a Landscaping growing industry leader. Team oriented, self motivated individuals are needed as leaders and assistants for our design/build, horticulture, turf and tree/shrub care divisions. Great advancement opportunities for the right candidates. Call us or send your resumé to 21223 Mullin, Warren, MI 48089, 810-756-1145

The staff at Bosch's Landscape & Lawn Specialties, Inc. is presently seeking out a full-time salesman who will meet with the clients for design sales & manage 2-3 landscape installation crews. This individual needs to be self-motivated, dynamic, organized, and possess good people skills. If this sounds like your kind of job, please call Barry Bosch to arrange an interview.

Bosch's Landscape &
Lawn Specialties, Inc.
4275 136th Avenue
Holland, MI 49424
(616) 399-6861, Fax (616) 399-2407

Construction Product Sales

Position open for aggressive individual in construction related products in SE Michigan area. Salary, benefits, bonuses & profit sharing. Candidate should have contractor sales experience and/or sales career objectives. Mail or fax (248) 887-0855. Résumé to:

Sales Manager
Construction Supply Inc.
Box 668
Highland, MI 48357

Garden Artists

Wanted! Creative, energetic individuals able to withstand Mother Nature and love it, to join small but growing landscape firm. Work includes new garden installation as well as garden maintenance. Majority of jobs in the Grosse Pointes. Pay is commensurate with experience. Call Sherrie 313-884-1109 or Mildred 313-881-2223.



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LANDSCAPE ASSOCIATES
LLC**

High growth company has opportunities in all departments.

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- Planting & maintenance
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We do it all and we care about our employees. What do you have to offer us? Send résumé. EOE

4875 Product Drive
Wixom, Michigan 48393
(248) 685-0123
Fax (248) 684-5481

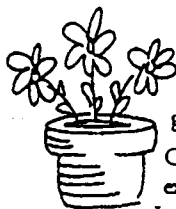
WE'RE LOOKING FOR A FEW GREAT PEOPLE

If you are career oriented, willing to learn and work hard, we want you on the D & B Team. Immediate openings for landscape leaders and supervisors, lawn, tree & shrub care operators. Positions also available for an experienced purchasing agent, landscape design estimators and sales representatives.

Excellent salary and benefits package. Full time employment. Send résumé

Attention: Dan Bywalec
D & B Landscaping, Inc.
38281 Schoolcraft Road, Unit H
Livonia, MI 48150
(313) 534-5515
(313) 534-5923 fax

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Come on and get hands on experience in the service industry. Internships, part-time and seasonal work. Our services include the installation of annuals, perennials and some nursery stock. Seasonal maintenance and garden consulting.

Jodi Ayn Cook
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Lawn Care Maintenance

Requirements include a minimum of 3 years experience as a certified commercial applicator and an Associate's Degree in the landscape field or equivalent in on the job work experience. Responsibilities are to work with and assist other qualified lawn care staff in all areas of landscape maintenance including lawn care, weed control, pruning, tree and shrub care, and flower bed maintenance. Ideal candidates will possess a general knowledge of diagnostic skills and control strategies of weeds, diseases and insects. Other specialty skills including pruning techniques will be beneficial. Please forward a résumé with cover letter including salary requirement to: Scott Klempel at Hollandia Gardens, 13057 Quincy Street, Holland, MI 49424. (616) 399-3334.

LANDSCAPE DESIGN/BUILD INTERNS

Full time and summer positions. Award winning, creative, innovative Landscape Architect seeking craftsmen, artists, and builders to help us implement our striking contemporary designs.

Telephone: John Hollowell, A.S.L.A., Ann Arbor, MI, 734-668-7519

Landscape Architect / Designer

Established design/build company located in West Michigan seeks full-timed person to design, estimate, sell and supervise upscale residential projects. A degree with 1-2 years experience or 3-5 years experience in design and sales. Full benefit package and use of company vehicle included. Send résumé to: P.O. Box 150333, Grand Rapids, MI 49515-0333.

Landscape Crew Leaders

needed (1999 season) for an established horticultural service company in the metro Detroit area. Full time, seasonal position, salary based on education and experience. Applicants must have leadership skills and knowledge or ornamental landscape installation and maintenance. If you love people and plants, join our team of professionals dedicated to high quality work and customer service. Please fax or mail résumé to:

HORTICULTURAL SERVICES, INC.
6053 Elizabeth Lake Road
Waterford, MI 48327
Fax (248) 683-2646
ATTN: Nicole

DESIGN-BUILD

Since 1867 Hunzikers Inc. has provided the Michiana area with high quality award-winning landscape design/build projects. Currently we are seeking a highly motivated, organized Landscape Architect with a minimum 3 years experience in the design/build field. This is a fast paced, sales focused position. Must have a proven sales record.

Hunzikers Inc
P.O. Box 397, Niles, MI 49120
(616) 683-9555, fax (616) 683-3553

Wanted: college student for summer internships. Benefits include: wage, housing for out of state students, a great learning environment.

We are looking for a person who wants to learn and work in our 600 acre wholesale and retail nursery business. You will have available to you the opportunity to work in sales, landscaping, and many other area of the nursery and landscaping business. We are located in Michigan between Jackson and Lansing, and will provide housing to the right person and a wage. You must supply your own transportation and an eagerness to work and learn. Please send résumé to:

Gee Farms Attn: Kary
14928 Bunkerhill Road
Stockbridge, MI 49285

SHERMAN NURSERY FARMS, serving the Port Huron area has openings for a Supervisor/Crew Leader. Job includes all phases of nursery operations and landscape contracting. We have positions open for an internship and a permanent full-time position. We offer competitive wages and benefits. To apply send a résumé to Sherman Nursery Farms, 2200 Mayer Rd., Columbus, Michigan 48063 or fax your résumé to (810) 329-26767.

Birchwood Farm Landscape Co. is looking for an experienced, conscientious, hard working and dependable person to fill a full-time, year-round position in landscaping construction and property maintenance. The rate of pay is excellent with health, dental and vision benefits. This position has great potential for advancement. Also searching for summer interns. Please submit your résumé to:

Birchwood Farm Landscape Co.
P.O. Box 158
Harbor Springs, MI 49740

Landscape Design Services, Inc.

Established, expanding firm is seeking trainees and experienced people in the following areas: Landscape Construction, Turf Management, Grounds Maintenance, and Retail Nursery/Garden Center. Interested parties may submit résumés to the following address:

0-7351 West Olive Road
Holland, MI 49424

Job Placements * Job Placements



13800 Zubrick Road
Roanoke, Indiana 46783

We are looking for plant enthusiasts with career goals for:

- Sales (in-house and outside)
- Purchasing Assistant
- Plant Care Specialist

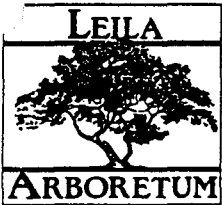
For further information contact Tim at Trelan Nursery
219-672-2119.

Twin Lakes Nursery, Inc.

Grand Rapids-area Landscape Design/Build company seeks:

- Construction Foremen
- Landscape Laborers
- Landscape Technician Assistants
- Interns

for employment starting in Spring 1999. Interested individuals should send résumé to: 3680 Michigan Rd. NE, Grand Rapids, MI 49525.



LEILA
ARBORETUM
SOCIETY
INTERNSHIPS

Leila Arboretum Society offers internships in community beautification, education and development of a 72-acre public garden.

Outreach/Education (1)

Work with neighborhood & community groups conducting beautification projects. Assist in adult and children's educational programming.

Horticulture/Records Development (1)

Maintains plant materials and accessioning database.

Horticulture/Grounds-Keeping (4-6)

Assist in grounds development & maintenance of Arboretum & gardens throughout the community.

Crew Leader (1-2)

Lead a team of peers through daily horticultural operations.

Leila Arboretum Society
928 W. Michigan Avenue
Bartle Creek, MI 49017
Phone: 616-969-0270 Fax: 616-969-0616

Landscape Manager seeking assistant or intern to work on award winning landscapes at The Wyndgate Golf Club. A background in one or all of the following areas: horticulture, landscape maintenance, and/or landscape construction, necessary. Pesticide certificate and CDL helpful. Contact: Michael Smith, Landscape Manager

Golf Course Development Co.
1975 W. Gunn Rd.
Rochester Hills, Michigan 48306
Phone: (248) 652-3451 ext. 3
Fax: (248) 652-9629



ENGLISH GARDENS
GROW WITH THE BEST!

LANDSCAPE INSTALLATION
IMMEDIATE OPENINGS for *Crew Leaders
*Assistant Crew Leaders ***Experience and CDL a plus! Multiple openings

Work for Metro-Detroit's premier landscaper.

WE OFFER:

- * Excellent Wages
- * 401(k)
- * Profit sharing
- * Gainsharing
- * Health insurance (BC/BS)
- * LOTS OF OVERTIME

YEAR ROUND EMPLOYMENT
OPPORTUNITIES!

Contact:

English Gardens
Landscape Department
1785 Rock Road
Walled Lake, MI
Phone: (248) 926-8210
Fax (248) 926-8212
EOE

Greater Detroit Landscape Co.

One of Michigan's leading landscape construction and maintenance companies

We have openings in the following positions:

- Construction - Planing Crews - Brick Paving - Foremen and Assistants
- Maintenance - Garden - Lawn Cutting Crews
- Spray Technician
- Nursery Sales Person
- Laborers

Excellent Wages - 401(k) - Health Insurance

Send your résumé to:

Attn: Bill Whetstone

Greater Detroit Landscape Co.
21000 Fairfield
Warren, MI 48089
Phone (810) 777-2000
Fax (810) 777-2090



Knapp Valley Gardens
616-363-8086

Join our award winning team. Openings available for motivated individuals in landscape construction and garden center. Full benefits.

Knapp Valley Landscape and Garden Center
616-363-8086

A leading landscape contractor of West Michigan seeks industrious full-time summer employees. Competitive wages, friendly work environment, internship possible. Reply to: Manager, 2515 Burlingame Avenue SW, Wyoming, MI 49509 or call (616) 532-0645.

Are you looking for an internship or a summer job? The Cottage Gardens, located in central Michigan has openings. We offer experience in horticultural distribution, as well as container growing. Come visit us, we would like to show you our operation. Our address is 2611 S. Waverly Hwy, Lansing, MI 48911 or call us at 517-882-5728.



WE'RE GEARING UP FOR SPRING!

As Metro Detroit's most respected residential design and maintenance firm, we are facing our busiest season yet. To meet the demand, we need motivated and energetic people to fill the following positions:

- Landscape Construction Project Managers
- Horticultural Maintenance Foremen
- Landscape Construction Foremen
- Turf Maintenance Foremen

We specialize in very high quality, high-end residential work and perform all aspects of landscaping. You could build ponds, install terraces, decks and spectacular plantings or maintain the gardens of the most beautiful homes in the area. This is a unique chance to learn and be part of a great organization. All of our positions are hands-on and give our employees the opportunity to specialize in their field of interest.

Though our work is outstanding, the work environment really sets us apart. The professionalism and support here is unrivaled. We offer both full-time and seasonal positions and are happy to work with students by providing professional internships. Foreman and managers earn top wages and benefits including paid vacations, medical and dental plans, life insurance and a company-matching retirement plan.

If you are interested in being part of this dynamic and unique organization, please call or forward your résumé to:

Pat Mocerri, Human Resources Manager
Three C's Landscaping, Inc.
22510 Hoover Road, Warren, MI 48098
(810) 757-5330, fax (810) 757-4719

62

Job Placements * Job Placements

LANDSCAPE PROFESSIONALS WANTED:

We are seeking candidates for the spring of 1999 in the following areas: design/sales, landscape installation, and landscape maintenance. We are a fast-paced company with competitive wages based upon experience. Apply/ Send résumé to:

WOLBERS LANDSCAPING, INC.

1276 N. State Rd.
Ionia, MI 48846
Fax - (616) 527-3851
EOE & Drug Free

Employment opportunities available with Kelly Tech Services for the Ford Motor Land Services, a professional corporation serving residential and commercial properties in the Dearborn area. As a growing grounds maintenance and landscaper, we have positions available at entry level as well as our full time staff. We are seeking enthusiastic applicants with good skills in communication, organization and are hard working. We offer competitive wages and benefit packages.

Kelly Professional Services
PO Box 667
Dearborn, MI 48121-0667
(313) 271-7822

ATTN: FORD MOTOR LAND
Ed Hudley

Rainbow Landscaping Inc. is looking for career minded individuals. We install landscapes, water falls, brick pavers, lighting. Good pay, benefits available. Shelby Twp. MI Phone: 810-731-9664 Fax: 810-731-0644.

Join the staff of one of the
top 10 nurseries in the United States

MERCHANDISERS - Spend the summer assisting garden centers in the care and presentation of Zelenka plants.

PRODUCTION - Begin your career as a grower, specializing in plant care, irrigation, inventory management or integrated pest management.

INTERNSHIPS - Complete your college internship requirements in production or marketing/sales.

Reply to
Human
Resources:
ZELENA NURSERY, INC.
16127 Winans Street
Grand Haven, MI 49417
ZelenkaHR@novagate.com
Fax: 616-842-0829

ZELENA NURSERY, INC.
7437 Rockridge/Sims Road
Sims, NC 27880
ZelenkaHR@simflex.com
Fax: 252-243-2443



Friendly, experienced Horticulturists needed for Landscape Design, Retail Sales and/or Landscape Construction at newly expanded garden center & greenhouse in Brighton.

Leppok Nursery
1-810-227-2566

Midwest Groundcovers is a large wholesale container nursery in northern IL with a production facility in Michigan. Our company offers a variety of positions from internships, part/full time seasonal positions and part/full time permanent positions. These positions are available in the following areas: Propagation, Wholesale and Retail sales and Inventory. If you would be interested in joining our organization please contact Heidi at (847) 742-1790 or e-mail us at mgmail@midwestgroundcovers.com. Feel free to visit our web site at www.midwestgroundcovers.com

Saline Ford Tractor Sales

We have a permanent full-time sales position to fill. We pay base salary, commissions, incentives and bonuses. Health benefits and retirement available. Send résumé to:

PO Box 457
Saline, Michigan 48176

INLAND LAKES LANDSCAPING CORP.

Inland Lakes Landscaping Corp. is an innovative, medium-large size Design/Build firm located in central Oakland County, Michigan. We specialize in prominent residential landscaping and extensive lakefront renovations primarily in Bloomfield Hills and surrounding areas. We also construct large-scale commercial projects throughout South Eastern Michigan. We will have the following positions open in the Spring of 1999.

Landscape Foreman

Manage a work crew on job site. Report daily work progress. Work with Foreman Supervisor to plan and schedule work at job site.

Assistant Landscape Foreman/Labor

Hands-on tree and plant material handling, with various hardscape construction project. A wide range of equipment operations.

Sales Person/Designer

Following through with provided customer leads. Preparation, presentation, production of architectural drawings, conducting site plan analysis and assisting in project development. In-house CAD capabilities available.

Contact Person:

Delilah Fisher
Human Resource Manager
Inland Lakes Landscaping Corp.
560 S. Telegraph Road
Pontiac, MI 48341
Phone: 800-860-6705
FAX: 248-338-6705

1999 Seasonal and Part-Time Job Listings:

Golf Course Ranger - Must be minimum of 18 years of age with valid Michigan drivers license. Must have excellent personality in dealing with the public along with a knowledge of the game of golf. Must be able to perform some physical labor. Start approximately April and work through September. Work is scheduled for approximately 20 hours per week. This is a seven day a week operation.

Golf & Park Maintenance - Must be minimum of 18 years of age with valid Michigan drivers license. Work is scheduled for 40 hours per week beginning April 1 and continues through September. Work consists of outside grounds maintenance of all city parks and golf courses.

Forestry Maintenance - Must be minimum of 18 years of age with valid Michigan drivers license. Work 40 hours per week from April to possibly December. Will accept applicants who can work May 15 - September 15. Prior landscape and forestry field work experience is preferred.

Park Ranger - Mature young adult (minimum 18 years of age) with a valid Michigan drivers license. Must have excellent personality and be able to perform some physical labor. Must be a responsible person with ability to confront users of facilities not conforming to stated rules. Start approximately May 1 through October 31. Work is scheduled 35 - 40 hours per work week. This is a seven day a week operation.

Bus Operator - Must be a minimum of 21 years of age with a valid Michigan CDL. Applicants must be able to drive either manual or automatic transmission vehicle. Applicant is required to have a current CDL and CPR card. Hours will vary.

Pay rates set at industry/union standards and approved by City Council. Send résumé to:

City of Southfield
Department of Parks & Recreation
PO Box 2055
Southfield, MI 48037-2055



Reder Landscaping is an established and expanding design-build firm specializing in high-end residential landscape design and

installations. We are currently seeking motivated and qualified individuals for the following positions:

- Landscape Design/Sales
- Horticulturist/Diagnostic Specialist
- Nursery Management/Retail Sales

Outstanding salary opportunities with health and retirement benefits.

Fax or send résumés to:

Reder Landscaping, Inc.
3805 N. Rockwell Dr.
Midland, MI 48642
Phone (517) 835-8260
Fax (517) 835-9471



DROST LANDSCAPE Design & Construction

P.O. Box 187 • Alton, MI 48706 • 616-548-2480 • Fax 616-548-3020

Job Description

Title: Ornamental Landscape Interns
Supervisor: Landscape Division Manager
Date: December 2, 1997

Job Summary:

Perform jobs related to, but not limited to, installing an attractive and functional ornamental landscape. Job responsibilities are expected to be carried out in an efficient, organized manner.

Job Responsibilities:

- Heavy landscaping, pruning, bed edging, spreading woodbark, and any other closely related tasks.
- Work well with one to two individuals within a crew.
- Willingness to learn, study, and comment objectively to management.

Qualifications/Experience:

- Must be able to work with individuals to efficiently complete job related tasks.
- Must project a positive, professional image.
- Must be able to present the company and your image to clients in a friendly, yet professional manner.
- Must have a basic knowledge of plant material with regards to growth habits, pruning requirements, landscape intent, potential problems, and a willingness to learn.
- Must have Commercial Drivers License or be willing to obtain one.

Compensation:

- Hourly rate and benefits based on qualifications and experience.

Contact: Dale Drier/Paul Whitley

Grow With Us®

...the nation's leading supplier to golf course and landscape turf managers.

We are looking for success driven, career minded individuals to join our Service Center and Golf Course sales teams. Preferred candidates have education or training in agronomy, horticulture or related fields. They will have excellent organizational and communication skills, and they will be goal oriented.

We offer excellent starting salary, health and dental coverage, 401(k), insurance.

Send résumé to:

LESCO™

Attn: Mike Harris
1848 Skyline Drive
Greenwood, IN 46163
E-Mail sls369@lesco.com

EOE M/F/H/V

Do you enjoy a challenge within your career? Would you like to work in an environment where your knowledge would be used and expanded upon? Then give us a call.

We are a large greenhouse business that supplies plants locally and nationally. We are a growing company that prides itself on keeping ahead of industry trends and current with technology. We have been established since 1986 and plan continued growth and potential for dedicated, efficient team players. We feel our company is a great place to learn, as well as work with a team of people that really care about learning and doing an excellent job. We specialize in unique annuals and perennials, which is helpful for learning and job variety. We are looking for high energy, hard working, dedicated individuals to take our company into its future.

We offer competitive wages, an insurance benefit package, and job performance bonuses. We also offer flextime at certain times of the year. If you have an interest in plants, enjoy learning and feel you are up to a challenge please call Rick at 616-343-3560 between 9:00 AM - 3:00 PM M-F for detailed information about the positions.

The following positions will be starting December 1998.

GROWER MANAGER
PRODUCTION TEAM/SHIPPING MANAGER
DRIVER/MAINTENANCE MANAGER

Ornamental Landscape Maintenance Manager

needed (1999 season) for an established Horticultural service company in the metro Detroit area. Salary range of 20-25K with benefits, 9 month working season. Applicants must have knowledge of annuals, perennials, bulbs, pruning, ornamental trees & shrubs, and have leadership skills. If you love people and plants, join our team of professionals dedicated to high quality work & customer service.

Please fax or mail résumé to:

HORTICULTURAL SERVICES, INC.

6053 Elizabeth Lake Road
Waterford, MI 48327
Fax (248) 683-2646
ATTN: Nicole

Lanser Landscape & Mngt. Inc.

Family business in SE edge of Grand Rapids is seeking a dedicated person to join their team. Job could include: Design, Construction and Maintenance. People skills a priority as well as practical and technical abilities.

Lanser's
8606 Morse Lake Rd.
Alto, MI 49302
(616) 868-7665

Lowe's Home Centers, Inc., Jackson, Michigan currently has openings for Cashiers, Loaders, Customer Service Associates, and Stockers. We are looking for friendly, outgoing people that are available to work nights and weekends in a fast paced, ever changing environment. Open interviews are conducted on Tuesdays 9:00 - 11:00 AM and Thursdays 3:00 - 6:00 PM. EOE

PLYMOUTH NURSERY and GARDEN CENTER



INTERNSHIPS/FULL TIME POSITIONS

We have been an established Landscape Nursery and Garden Center since 1963. We offer outstanding opportunities for ambitious people with horticultural and/or landscape interests. Due to the scope of our organization we can offer a variety of valuable experience for our Interns and a competitive salary/benefit package for the Industry Professional. Positions are available in Landscape, Nursery, Garden Center, or Design Departments.

Send résumé to:

Plymouth Nursery and Garden Center
9900 Plymouth-Ann Arbor Rd.
Plymouth, MI 48170
Attn: Human Resources



ENGLISH GARDENS GROW WITH THE BEST!

Internships and full-time employment will be available for Spring 1999. English Gardens now has 6 locations with employment opportunities in the Nursery/Garden Center/Landscape Departments.

MANY OF OUR INTERNSHIPS TURN INTO FULL-TIME YEAR ROUND POSITIONS!

Dearborn Height, Clinton Twp., West Bloomfield, Royal Oak and Eastpoint Stores:

- Garden Center/Greenhouse Sales
- Nursery/Bedding Plant Sales

Landscape Department:

- Landscape Yard Crew Leader
- Landscape Installation Crew Leader
- Landscape Design Interns
- Landscape Installation Interns

We offer excellent wages, great benefits, a gainsharing program, internship tuition reimbursement and LOTS OF OVERTIME! Call, write or fax résumés to:

English Gardens
6370 Orchard Lake Road
West Bloomfield, MI 48322
Phone: (248) 855-9240, ext. 245
Fax: (248) 855-0646

Job Placements * Job Placements



Mike's Tree Surgeons, Inc.

URBAN FORESTERS AND ARBORISTS DEDICATED TO TREE HEALTH

One of Michigan's established landscape and tree care companies is looking for more bright, enthusiastic, and creative people to join their ranks. Mike's Tree Surgeons, Inc. is education oriented and offers ongoing training, 401(k), health and dental insurance. Looking for reliable, hard working people who enjoy working outdoors and are willing to be team players. Must have valid driver's license and be able to meet DOT requirements. Competitive wage range depending on experience. Internships, students, and part- or full-time permanent positions available include:

- LANDSCAPE FOREMAN/LABORERS
- CERTIFIED PLANT HEALTH CARE TECHNICIANS
- CERTIFIED ARBORISTS/CLIMBERS
- CERTIFIED LAWN CARE TECHNICIANS

Mail in résumé or apply in person today:
 Mike's Tree Surgeons, Inc.
 263 Park Street, Troy, MI 48083
 (248) 588-0202 Office
 (248) 588-1824 Fax
 E-mail: mikesre@flash.net

EMPLOYMENT OPPORTUNITY

Arborist - Seeking qualified candidates to perform tree pruning, removal and related tree care functions. Experience in insect and disease diagnosis helpful. Individuals must be committed to the highest standards of safety, workmanship, and customer service. Please write or call Poortenga Tree Service, Inc., Ken-o-sha Industrial Dr. S.E., Grand Rapids, MI 49508. (616) 245-9449.

MURRAY'S

Landscape Center

Murray's Landscape & Garden Center in Commerce Twp., Michigan is growing and we NEED YOU to accomplish our goal! We are a quality/customer oriented company serving the lakes area for 18 years.

Openings are available in both our Landscape and Garden Center departments:

- Garden Center Assistant Manager (Full Time)
- Retail Garden Center Sales (Flexible Hours)
- Delivery Driver
- Hard Construction/Installation Foremen (Full Time)
- Landscape/Construction Laborers

These team positions provide excellent opportunity for highly motivated individuals. Benefits available (insurance, 401k) - Competitive wages based on experience. Send résumé or call:

Murray's Landscape Center
 9640 Commerce Rd.
 Commerce Twp., Michigan 48382
 (248) 363-1620

Pine Hill Nursery, a unique and growing landscape nursery and retail sales business, has openings in:

1. Landscape design/ installation
2. Landscape assistants/ interns
3. Retail garden sales/ greenhouse growers

Positions and internships available for knowledgeable, self-motivated individuals.

Those interested should contact Sandy Naples at:
 Pine Hill Nursery (20 miles north of Traverse City)
 886 U.S. 31 North
 Kewadin, Michigan 49648

Or you may call or fax information to:
 616-599-2824 (phone)
 616-599-2016 (fax)



LANDSCAPING & SUPPLY

LANDSCAPE DESIGN OPENING:

With medium sized firm - must have knowledge of plant material, construction requirements, and coordination skills. Please fax résumé with salary requirements to Jenni @ 248-889-2470

LANDSCAPE INSTALLATION FOREMAN:

Work with new equipment, excellent crew, and a great company to make your future more predictable. Must have knowledge of related equipment, plant material, and great leadership qualities. Please fax résumé to Jenni @ 248-889-2470 or call 248-889-5310.

This is an opportunity to join the award winning staff at MUELLER'S SUNRISE NURSERY: a company with forty years experience in business, offering honesty & integrity to its clients & employees, with a current objective to expand its market share.

OPENING FOR FULL TIME EMPLOYEES INCLUDE:

DESIGNER-ESTIMATOR-SALESPERSON:

Position open to join four other staff designers. Salary commensurate with skills &/or experience. Commission on sales. Benefits include health insurance & mileage.

PAVER-LANDSCAPE CONSTRUCTION FOREMAN:

Position open as job chief, joining 5 other foremen. Hourly wages reflect experience & proficiency. Overtime over 40 hours. Benefits are available.

RETAIL GARDEN SALES:

Sales, as well as field & yard maintenance positions open, with possible supervisory situation available. Hourly wages reflect knowledge and responsibilities. Commission on sales. Overtime over 40 hours. Benefits are available.

OPENINGS FOR INTERNS MAY BE IN ANY OF THE ABOVE JOB CLASSIFICATIONS

Call to make an appointment to interview with Jeff or Rudy...248-651-0039.

Landscape Foreman

A well-established landscape company serving southwest Michigan is searching for an experienced, detail oriented CONSTRUCTION FOREMAN.

Candidate must possess:

- * A thorough knowledge of plants and planting procedures;
- * Ability to effectively communicate with clients and crew;
- * Ability to operate various kinds of landscape equipment;
- * Construction knowledge of boulder walls, grading, brick work, etc.;
- * A valid drivers license and a good driving record.

Excellent wages with benefits. Please call for an interview or send résumé to:

Nature's Way Landscaping
 1113 W. John Beers Road
 Stevensville, MI 49127
 Ph: (616) 429-1694
 Fax: (616) 429-5799



DROST LANDSCAPE

Design & Construction

P.O. Box 187 - Algonquin, MI 49708 - 516-548-2480 - Fax 516-548-3020

Job Description

Title: Ornamental Landscape Crew Foreman
 Supervisor: Landscape Division Manager
 Date: December 2, 1997
 Level: Crew Foreman

Job Summary:

Perform jobs related to, but not limited to, installing an attractive and functional ornamental landscape. Job responsibilities are expected to be carried out in an efficient, organized manner.

Job Responsibilities:

- Heavy landscaping, pruning, bed edging, spreading woodbark, and any other closely related tasks.
- Overseeing and directing two or more individuals within a crew.
- Assist in maintaining inventory materials.

Qualifications/Experience:

- Must be able to lead individuals and organize your workload to efficiently complete job related tasks.
- Must project a positive, professional image.
- Must be able to present the company and your image to clients in a friendly, yet professional manner.
- Must have good basic knowledge of plant material with regards to growth habits, pruning requirements, landscape intent and potential problems.
- Must have Commercial Drivers License or be able to obtain one.

Compensation:

- Hourly rate and benefits based on qualifications and experience.

Contact: Dale Drier/Paul Whitley



TORRE & BRUGLIO

Torre & Bruglio, Inc. • Landscape Contractors/Horticultural Services

Landscape Design/Construction/Horticultural Services

Torre & Bruglio is the largest and fastest growing full service commercial horticultural services and landscaping firm in Michigan. Our rapid growth rate requires a continual search for dynamic and talented people that want to grow with us!

Right now we need:

- Grounds Care Supervisors
- Lawn Care Technicians
- Equipment Operators
- Groundskeepers
- Internships and Work-Study Programs also available.
- Landscape Construction Supervisors
- Horticulturists/Pruning Supervisors
- Mechanics
- Project Managers

Come Join the Best.

We are Michigan's award-winning horticultural services team. If you take pride in your work and strive for perfection, you owe it to yourself.

Please call our office to make an appointment and submit your application. We are located at:

850 Featherstone Road

Pontiac, MI 48342-1723

(248) 452-9292

(248) 452-9293 (Fax)

New Canton Location Opening Soon:

5100 DeWitt

Canton, MI 48188

We offer excellent working conditions, state of the art equipment, health insurance, premiere job sites, 401(k), ample hours, solid growth opportunities, paid training, and an opportunity to work with the best green people in the business.

Please call our Human Resources Department at (248) 452-9292.

JOIN THE BEST!

JOIN US!

Job Placements * Job Placements



ARE YOU LOOKING FOR WORK-STUDY OR INTERNSHIP OPPORTUNITIES?

We are a national leader in the Nursery Industry with opportunities in CT, NJ, & OR. Our continued growth has created many entry level career positions. These opportunities include: propagation, container & field horticultural activities, shipping, and order picking. We will create a custom work-study, internship, part-time or full-time position, for the right individuals. Educational assistance programs may be available. If you are interested in learning all of the production activities in a fast paced wholesale environment, please forward your résumé to Mr. Dick King, Human Resources, The Robert Baker Companies, 1700 Mountain Rd., W. Suffield, CT 06093-0434. Direct inquiries may be e-mailed to ddoyle@robertbaker.com.

Be sure to look for us in the upcoming trade shows:
 ERNA - Atlantic City Convention Center - 11/3/98
 MANTS - Baltimore Convention Center - 1/4/99
 MID-AM - Navy Pier, Chicago, IL - 1/13/99
 CENTS (OH) - Columbus Convention Center - 1/24/99
 New England Grows (MA) - Hynes Convention Center - 1/27/99

Intern/Summer Employment

Well established retail/wholesale production nursery in Grand Rapids, Michigan area is seeking a horticulture student for a possible internship or full-time summer position for Summer, 1999. Applicants should be self-motivated and possess basic knowledge of woody and herbaceous ornamentals. Please send résumé to:

Shaner Avenue Nursery
 Attn: Kristin Opperman
 11421 Shaner Avenue
 Rockford, MI 49341

Van Atta's Greenhouse and Flower Shop
 517-339-1142

Nursery Manager Position

- Competitive wages
- Retirement
- Health Insurance
- Disability Insurance
- Paid Holidays
- Paid Vacations (up to 3 weeks)
- Bonuses

Must have at least 3 years of experience and education. Duties include hiring, purchasing, spraying, sales, management of staff, and scheduling.

Seasonal Positions: Taking Applications

- Knowledgeable Salespeople
- Laborers
- Cashiers
- Drivers
- Landscapers

Working for Spring, Summer and Fall positions starting February '99. Ask for George.

9008 Old M-78
 Haslett, MI 48840
 Fax 517-339-0172
 Toll-free 800-395-6448



WEST MICHIGAN TREE SERVICES

A DIVISION OF GRAND RAPIDS GROUP INC.

Career Opportunity

West Michigan Tree Services seeks qualified individuals to provide tree and shrub care throughout Grand Rapids and the Lakeshore area. Join our team and receive competitive pay, health insurance, 401K retirement program, paid holidays and a positive work environment.

P.O. Box 151455
 Grand Rapids, MI 49505
 (800) 356-7414
 E-mail: gdarbor@aol.com



Shemin Nurseries INC.

HORTICULTURAL DISTRIBUTION CENTERS
 Our Standard is Excellence

Planting the seeds for success!

Come grow with Shemin Nurseries, Inc., the largest wholesale distributor in the world that has been the successful provider of horticulture materials and plants for over 30 years. And we owe it all to the outstanding people who work with us and share our philosophy in providing excellence to a diverse range of clients.

Our continued expansion has opened up opportunities in the following areas:

- Sales
- Customer Service
- Production
- Administrative Support
- Driver - CDL

We are a hands-on team oriented environment which allows for professional development. If you're looking for greener pastures and a company that offers a comprehensive salary and benefits package, please forward your résumé and salary requirements to:

Shemin Nurseries, Inc.

HR Dept
 6900 Pardee Road
 Taylor, MI 48180
 Phone: (313) 291-1200
 Fax: (313) 291-2838

OR

HR Dept
 900 Featherstone Road
 Pontiac, MI 48342
 Phone: (248) 333-1090
 Fax: (248) 335-5229

OR

HR Dept
 27400 Beck Road
 Novi, MI 48374
 Phone: (313) 291-1200
 Fax: (313) 291-2538

Weesies' Landscape Service, Inc.
 3700 Quiggle S.E.
 Ada, Michigan 49301

We are a design build landscape company looking for landscape workers to help us on our projects. We do landscape plantings, construction features such as decks, waterfalls, walls, etc.

Phone (616) 868-6548

Business/Horticulture/Landscape Students: Looking for work experience in shipping, sales, production, personnel management, or plant health? Twixwood Nursery, a wholesale perennial, vine, and groundcover grower is looking for spring and summer interns. We have over 400,000 sq. ft. under poly, in-house seeding and vegetative propagation programs, field production, and shipping/sales facilities. Twixwood offers competitive wages and will work with you to gain the experience you want. Contact Anna Williams, Twixwood Nursery, 4669 E. Hillcrest, Berrien Springs, MI 49103, (616) 471-7408.

Sales Opportunities

Sherman Nursery Company is currently looking for an outside/inside sales representative and an inside customer service representative. Candidates hired for the position must be self-motivated, energetic and sales oriented. We offer a complete benefit package. Candidates interested in these positions should send a résumé and salary requirements in confidence to:

Dale M. Siems
 Sherman Nursery Company
 1300 W. Grove Street
 Charles City, IA 50616
 1-800-747-5980

PLYMOUTH NURSERY and GARDEN CENTER

Garden Center MERCHANDISE MANAGER

One of S.E. Michigan's largest Nursery and Garden Centers has a position available for a qualified individual. We are a progressive garden center and design/build landscape firm established since 1963. Seeking a hard working, motivated individual with experience in purchasing, inventory control, displays and scheduling, with a horticultural background and knowledge of computer systems as well as supervisory skills. College degree and 4 years experience preferred. Competitive salary/benefits package.

Send résumé to:

Plymouth Nursery and Garden Center
 9900 Plymouth-Ann Arbor Rd.
 Plymouth, MI 48170
 Attn: Human Resources

Job Placements * Job Placements

Ray Wiegand's Nursery, Inc.

Ray Wiegand's state-of-the-art Garden Center, located in Lomb Township is currently seeking experienced nursery sales people to sell plants and related supplies to their wonderful customers. Candidates should be energetic with strong people and sales skills. Full or part-time positions available. Salary based on level of experience. Please fax or send resumé to Lynette Sabotek:

Ray Wiegand's Nursery, Inc.
47625 Romeo Plank Road
Macomb, MI 48044
Phone: 810-286-3655
Fax: 810-286-7299

Wildwood Landscape is looking for dedicated, highly motivated individuals to work in either our lawn or landscape division. Wildwood Landscape is a medium sized company with an excellent client base that takes great pride in the work we do. Wildwood Landscape was founded 8 years ago by Justin Heyboer who was a Michigan State University Horticulture student. We are looking for students interested in internships of part time work. You may be involved in many different aspects of our landscape company. We are very excited to hear from you... Please fax us your resumé at 616-698-5045.

Landscape and Irrigation technicians wanted. Learn the industry in beautiful Traverse City, Traverse Outdoor, Inc. 2700 Townline Rd., Traverse City, MI 49686. (616) 4496.

Garden Center

Position available beginning Spring 1999. Applicant must be a hard-working, dedicated individual. Plant knowledge a must! Equipment experience needed. Please send resumé to:

Touch of Nature, Inc.
10630 S. Gera Rd.
Birch Run, MI 48415

APPLICATOR/DIAGNOSTICIAN for Landscape Woody Plants

FULL TIME AND SEASONAL POSITIONS
Starting Date: March 1 or earlier

Owen Tree Service is a progressive tree care company looking for self-motivated individuals to diagnose and treat landscape plant problems in affluent Northern Detroit suburbs. Background in woody plant and pest identification very beneficial. Desire to learn a must. We are offering competitive wages, as well as an excellent benefit package, and opportunity for advancement. Equal Opportunity Employer. Direct inquiries and resumé to Kay or Randy.

Owen Tree Service, Inc.
225 N Lake George Road
Attica, MI 48412
1-800-724-6680



YARDMASTER inc.

Yardmaster, Inc. is a progressive design build company located along the shores of Lake Michigan.

We have opportunities on our team for motivated, talented people.

Landscape Design/Salesperson
Landscape Construction Foreman
Lawn Maintenance Supervisor
Installation Crew Members

Yardmaster, Inc.
12293 152nd Avenue
West Olive, MI 49460-9629
Phone 616-842-2791
Fax (616) 847-1526

Spring 1999: position for landscape person to work in field with owner of small design/build firm. Send resumé to Winding Creek Landscapes, 5439 Farr Road, Fruitport, MI 49415.



PERENNIAL IMPRESSIONS, INC.

One of Michigan's Leading Perennial Garden Design, Installation and Maintenance Firms Seeks Qualified Individuals for the Following Positions:

Manager, Prep Crew: Responsible for management of four person crew executing ground prep, tree and shrub installation and hardscape.

Manager, Maintenance Crews (2): Each responsible for management of five person crew providing on-going maintenance service to approximately 40 clients.

Internships (May through August): working in prep, maintenance, inventory order and maintenance, installation and design. All applicants should have, or be in the process of obtaining, a degree in horticulture or related field.

Come work with talented professionals and earn premium wages while you apply the skills you have acquired. Don't wait, call Sandy, Ken or Lidia at 248-628-0937 to arrange an interview and/or fax us your resume at 248-628-0799. 3724 Noble Rd., Oxford, Michigan 48370 E mail: PerImplnc@aol.com

SECTION 10

EVALUATION OF EQUIPMENT AND FACILITIES

Evaluation of Equipment and Facilities

The evaluation of the equipment and facilities was conducted by polling the faculty who teach the program courses. This survey instrument is found on the following pages along with their responses. As has been stated previously, the faculty see a serious need for additional facilities and equipment. Of particular concern is the need for expanded greenhouse facilities.

EQUIPMENT NEEDS PERCEPTIONS OF THE ORNAMENTAL HORTICULTURE PROGRAM

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Unknown
1. The facilities and equipment are sufficient to support quality education.		25%			75%	
2. The support services are sufficient to support quality laboratory experiences.	25%	25%	50%			
3. The Program costs are in line with other science based programs at FSU.	50%	25%	25%			
4. . The support services are sufficient to support quality field experiences.	25%		25%	25%	25%	

In this space and on the reverse side, please comment on any of your responses. The Ornamental Horticulture program is most interested in identifying what you perceive as strengths, weaknesses and problems in the Program. Thank you.

Equipment Needs Perceptions of the Ornamental Horticulture Program

1. *The facilities and equipment are sufficient to support quality education.*

Agree- 1/4 (25%), Strongly Disagree-3/4 (75%).

2. *The support services are sufficient to support quality laboratory experiences.*

Strongly Agree- 1/4 (25%), Agree-1/4 (25%), Neutral- 2/4 (50%).

3. *The Program costs are in line with other science based programs at FSU.*

Strongly Agree- 2/4 (50%), Agree-1/4 (25%), Neutral-1/4 (25%).

4. *The support services are sufficient to support quality field experiences.*

Strongly Agree-1/4 (25%), Neutral-1/4 (25%), Disagree-1/4 (25%), Strongly Disagree-1/4 (25%).

Comments:

- The need for a new, larger greenhouse with supporting equipment is especially critical.
- The greenhouse facility is inadequate for the number of students in this program and will obviously not be enough for any increase.
- The need for a new, larger greenhouse is critical. The Program also needs more incubators.
- Strengths-personnel, weaknesses-field equipment, storage, lab equipment, budget, greenhouse.

SECTION 11

CURRICULUM EVALUATION

Curriculum Evaluation

The Ornamental Horticulture Technology program curriculum is found on the following pages. This curriculum is the result of many changes that have been made during the 25 years that the program has been in existence. The program has made changes in response to the changing needs of the industries that hire our graduates. These changes are made on the recommendation of the program advisory committee. At our annual meeting, the members of the advisory committee are asked specifically if the program curriculum is still meeting the needs of industry. The committee members are selected based on their involvement in various areas of the horticulture industry.

ORNAMENTAL HORTICULTURE TECHNOLOGY
FERRIS STATE UNIVERSITY
College of Arts and Sciences
Associate in Applied Science Degree
(60 credit hour minimum)

You are expected to maintain contact with your faculty advisor and attend special meetings that may be held during the academic year.

General Education Requirements

- a. Communication Competence 6 credits
 - 1) ENGL150 English 1 (3)
 - 2) ENGL211 Industrial and Career Writing (3)
- b. Scientific Understanding 3 credits
Achieved through program course work
- c. Quantitative Skills
MATH115 Competency
- d. Cultural Enrichment Electives 3 credits
- e. Social Awareness Electives 3 credits

Program

- BIOL113 Basic Botany (3)
- HORT111 Landscape Plant Identification 1 (3)
- HORT112 Landscape Plant Identification 2 (3)
- HORT136 Plant Pathology (3)
- HORT138 Insect Pest Management (4)
- HORT150 Landscape Design (4)
- HORT151 Landscape Plant Management (4)
- HORT225 Turfgrass Management (4)
- HORT250 Horticulture Seminar (1)
- HORT291 OHT Internship (1 - 5)
- MGMT310 Small Business Management (3)

Electives to a total requirement of 60 credits including General Education Requirements Consult with faculty advisor for proper course selections

Recommend:

- COMM121 Fundamental of Public Speaking (3)
- ISYS105 Microcomputer Applications (3)

Sample Course Sequence: Students must consult an advisor to develop a course sequence appropriate to their academic development and educational plans. The following chart depicts one method to complete the requirements listed above. This plan incorporates prerequisite course work, approximate course, load and appropriate course work distribution.

<p>Fall Semester</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>MATH by placement (See Note)</td><td style="text-align: right;">3-4</td><td style="border-bottom: 1px solid black;">_____</td></tr> <tr><td>HORT111 Landscape Plant Identification 1</td><td style="text-align: right;">3</td><td style="border-bottom: 1px solid black;">_____</td></tr> <tr><td>HORT138 Insect Pest Management</td><td style="text-align: right;">4</td><td style="border-bottom: 1px solid black;">_____</td></tr> <tr><td>BIOL113 Basic Botany</td><td style="text-align: right;">3</td><td style="border-bottom: 1px solid black;">_____</td></tr> <tr><td></td><td style="text-align: right; border-top: 1px solid black;">13-14</td><td></td></tr> </table> <p>Winter Semester</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>HORT112 Landscape Plant Identification 2</td><td style="text-align: right;">3</td><td style="border-bottom: 1px solid black;">_____</td></tr> <tr><td>HORT136 Plant Pathology</td><td style="text-align: right;">3</td><td style="border-bottom: 1px solid black;">_____</td></tr> <tr><td>Cultural Enrichment Elective</td><td style="text-align: right;">3</td><td style="border-bottom: 1px solid black;">_____</td></tr> <tr><td>ENGL150 English 1</td><td style="text-align: right;">3</td><td style="border-bottom: 1px solid black;">_____</td></tr> <tr><td>Elective: Recommend COMM121</td><td style="text-align: right;">3</td><td style="border-bottom: 1px solid black;">_____</td></tr> <tr><td></td><td style="text-align: right; border-top: 1px solid black;">15</td><td></td></tr> </table> <p>Summer Session</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>HORT291 OHT Internship</td><td style="text-align: right;">1-5</td><td style="border-bottom: 1px solid black;">_____</td></tr> <tr><td></td><td style="text-align: right; border-top: 1px solid black;">1-5</td><td></td></tr> </table>	MATH by placement (See Note)	3-4	_____	HORT111 Landscape Plant Identification 1	3	_____	HORT138 Insect Pest Management	4	_____	BIOL113 Basic Botany	3	_____		13-14		HORT112 Landscape Plant Identification 2	3	_____	HORT136 Plant Pathology	3	_____	Cultural Enrichment Elective	3	_____	ENGL150 English 1	3	_____	Elective: Recommend COMM121	3	_____		15		HORT291 OHT Internship	1-5	_____		1-5		<p>Fall Semester</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>ENGL 211 Industrial & Career Writing</td><td style="text-align: right;">3</td><td style="border-bottom: 1px solid black;">_____</td></tr> <tr><td>HORT 150 Landscape Design</td><td style="text-align: right;">4</td><td style="border-bottom: 1px solid black;">_____</td></tr> <tr><td>HORT 225 Turfgrass Management</td><td style="text-align: right;">4</td><td style="border-bottom: 1px solid black;">_____</td></tr> <tr><td>MGMT 310 Small Business Management</td><td style="text-align: right;">3</td><td style="border-bottom: 1px solid black;">_____</td></tr> <tr><td></td><td style="text-align: right; border-top: 1px solid black;">14</td><td></td></tr> </table> <p>Winter Semester</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>HORT 151 Landscape Plant Management</td><td style="text-align: right;">4</td><td style="border-bottom: 1px solid black;">_____</td></tr> <tr><td>HORT 250 Horticulture Seminar</td><td style="text-align: right;">1</td><td style="border-bottom: 1px solid black;">_____</td></tr> <tr><td>Social Awareness Elective</td><td style="text-align: right;">3</td><td style="border-bottom: 1px solid black;">_____</td></tr> <tr><td>Electives:</td><td style="text-align: right;">5 - 9</td><td style="border-bottom: 1px solid black;">_____</td></tr> <tr><td>(Recommend ISYS105)</td><td></td><td style="border-bottom: 1px solid black;">_____</td></tr> <tr><td></td><td style="text-align: right; border-top: 1px solid black;">13-17</td><td></td></tr> </table>	ENGL 211 Industrial & Career Writing	3	_____	HORT 150 Landscape Design	4	_____	HORT 225 Turfgrass Management	4	_____	MGMT 310 Small Business Management	3	_____		14		HORT 151 Landscape Plant Management	4	_____	HORT 250 Horticulture Seminar	1	_____	Social Awareness Elective	3	_____	Electives:	5 - 9	_____	(Recommend ISYS105)		_____		13-17	
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Note: MATH competence through MATH115 is required for graduation.

SECTION 12

ENROLLMENT TRENDS

Enrollment Trends

The following enrollment data was obtained from the office of Academic Affairs. These figures do not include a number of students that are pursuing a dual degree in which case they would not be reflected here.

94/95	95/96	96/97	97/98	98/99
39	28	27	26	28

The enrollment in the Ornamental Horticulture Technology program has remained relatively stable in the last few years. There does appear to be an upward trend that is beginning to develop. In the 98/99 academic year and based on preliminary figures for the 99/00 academic year, there is an upturn in enrollment.

The enrollment figures for the year 94/95 and those preceding it were higher. The main reason that enrollment for the last four years is lower than the preceding years comes as a result of the restructuring plan that was carried out by the University. When the restructuring plan was first announced, the OHT program was targeted for closure. This was later reversed but not before the significant press coverage and letters sent to prospective students announcing the program closure. The net impact was a significant drop in enrollment. The program also suffered a set back as a result of the retrenchment of one faculty position from the program. This has reduced the opportunity to recruit students through high school visits, trade show attendance and other avenues utilized to promote the program.

As we continue to offer a quality program and as demand for educated employees for outpaces the supply, we should continue to see improvement in enrollment data.

SECTION 13

PROGRAM PRODUCTIVITY AND COSTS

ADMINISTRATIVE PROGRAM REVIEW

Program/Department: Ornamental Horticulture Technology (Department of Biological Sciences)

Date Submitted: December 11, 1998 Dean: Sue Hammersmith

Please provide the following information:

Enrollment/Personnel

	Fall 1994	Fall 1995	Fall 1996	Fall 1997	Fall 1998
Tenure Track FTE	1.09	1.26	1.36	1.44	1.44
Overload/Supplemental FTEF	.44	.44	.44	.44	.88
Adjunct/Clinical FTEF (unpaid)					
Enrollment on-campus total*	39	28	27	26	28
Freshman	13	10	10	11	15
Sophomore	12	7	12	12	13
Junior					
Senior					
Masters					
Doctoral					
Enrollment Off-campus*					

*Use official count (7-day count for semesters, 5-day count for quarters.)

Financial

Expenditures*	FY 94	FY 95	FY 96	FY 97	FY 98
Supply & Expense	4,300	4,367	4,536	4,433	4,870
Equipment					
Gifts & Grants					

*Use end of fiscal year expenditures.

Other

	AY 93/94	AY 94/95	AY 95/96	AY 96/97	AY 97/98
Number of Graduates* - Total	15	12	13	12	13
-On campus	15	12	13	12	13
-Off campus					
Placement of Graduates	15	12	13	12	6
Average Salary	24,560	26,342	27,700	25,500	27,500
Productivity - Academic Year Average					
-Summer					
Summer Enrollment					

*Use total for academic year (F,W,S)

SECTION 14

CONCLUSIONS

Conclusions

- **The Ornamental Horticulture Technology(OHT) program is central to the mission of Ferris State University in providing a program that meets the specific needs of the ornamental horticulture industry in Michigan and the nation.**
- **The OHT program has the potential to increase enrollment.**
- **The OHT program has 100% placement in the field.**
- **The demand for FSU graduates is high.**
- **The OHT program easily ladders into four-year degree programs at FSU.**
- **There is a high demand for trained professionals in this field.**
- **There is a well-established base of internship sponsors for students in the program.**
- **The program provides instruction in the biology and maintenance of turfgrass for the Professional Golf Management(PGM) program.**
- **A new greenhouse addition will significantly enhance the quality of instruction.**
- **The program relies too heavily on one full-time faculty member.**
- **The student employment budget is insufficient to provide adequate greenhouse maintenance.**
- **Release time for the program coordinator should be increased to .25FTE per semester so that greater emphasis can be placed on program recruitment.**
- **Provide a separate supply and equipment budget to allow the program coordinator and department head to more effectively manage the OHT program costs.**

SECTION 15

RECOMMENDATIONS

Recommendations

The Ornamental Horticulture Technology program at Ferris State University is a leader in providing highly trained, educated graduates to meet the needs of a multibillion dollar horticulture industry in Michigan. Its innovative broad-based program continues to prepare students for careers in the various segments of the horticulture industry. Through the hands-on approach to instruction and the quality and dedication of the faculty who teach the courses, the program continues to enjoy an excellent reputation. The demand for program graduates is at an all time high. The tremendous demand for graduates should bring in new students who want to prepare for careers in this field.

To remain in a leadership position, Ferris State University needs to address some of the issues that have been brought out by this program review. For the continued preparation of our students and to recruit new students, we need to have a new fully equipped greenhouse. This will replace a greenhouse that has been on a "make do" basis for too long. With this new facility, we can begin to provide instruction that is currently limited by the current greenhouse. A new greenhouse will enhance instruction and be an educational outreach facility to the campus and the community. This should lead to increased recruiting opportunities. While the fall/99 entering class is the largest in years, we can do more to attract better prepared students into our program.

The program must make additions to its staffing for the continued growth of the program. The program coordinator must direct more effort into recruiting and development of new facilities rather than teach so many of the program courses. Additional faculty must be identified to teach program courses currently taught by the program coordinator as an overload. Program advising can not all be done by the program coordinator either. For these reasons, and because of the contributions made to the PGM and Biology Education program, the Biological Sciences department needs an additional tenure track faculty member to teach in the OHT program.

The program should have its own budget for supplies and equipment. This will allow the program coordinator to manage costs more accurately, especially if the program is successful in securing additional greenhouse facilities.

If the recommendations of the PRP are implemented, the Ornamental Horticulture Technology program will be able to maintain and expand its ability to prepare students for careers in the expanding horticulture industry.

SECTION 16

APPENDIX

Appendix H

PROGRAM REVIEW PANEL EVALUATION

Program: Ornamental Horticulture Technology

Instructions: Circle the number which most closely describes the program you are evaluating.

1. Student Perception of Instruction Average Score 4.5

5	4	3	2	1
---	---	---	---	---

Currently enrolled students rate instructional effectiveness as extremely high.

Currently enrolled students rate the instructional effectiveness as below average.

2. Student Satisfaction with Program Average Score 3.5

5	4	3	2	1
---	---	---	---	---

Currently enrolled students are very satisfied with the program faculty, equipment, facilities, and curriculum.

Currently enrolled students are not satisfied with program faculty, equipment, facilities, or curriculum.

3. Advisory Committee Perceptions of Program Average Score 2.75

5	4	3	2	1
---	---	---	---	---

Advisory committee members perceive the program curriculum, facilities, and equipment to be of the highest quality.

Advisory committee members perceive the program curriculum, facilities, and equipment needs improvement.

4. Demand for Graduates Average Score 5.0

5	4	3	2	1
---	---	---	---	---

Graduates easily find employment in field.

Graduates are sometimes forced to find positions out of their field.

5. Use of Information on Labor Market Average Score 4.75

5	4	3	2	1
---	---	---	---	---

The faculty and administrators use current data on labor market needs and emerging trends in job openings to systematically develop and evaluate the program.

The faculty and administrators do not use labor market data in planning or evaluating the program.

6. Use of Profession/Industry Standards Average Score 4.75

5	4	3	2	1
---	---	---	---	---

Profession/industry standards (such as licensing, certification, accreditation) are consistently used in planning and evaluating this program and content of its courses.

Little or no recognition is given to specific profession/industry standards in planning and evaluating this program.

7. Use of Student Follow-up Information Average Score 4.25

5	4	3	2	1
---	---	---	---	---

Current follow-up data on completers and leavers are consistently and systematically used in evaluating this program.

Student follow-up information has not been collected for use in evaluating this program.

8. Relevance of Supportive Courses Average Score 4.25

5	4	3	2	1
---	---	---	---	---

Applicable supportive courses are closely coordinated with this program and are kept relevant to program goals and current to the needs of students.

Supportive course content reflects no planned approach to meeting needs of students in this program.

9. Qualifications of Administrators and Supervisors Average Score 4.5

5	4	3	2	1
---	---	---	---	---

All persons responsible for directing and coordinating this program demonstrate a high level of administrative ability.

Persons responsible for directing and coordinating this program have little administrative training and experience.

10. Instructional Staffing Average Score 2.0

5	4	3	2	1
---	---	---	---	---

Instructional staffing for this program is sufficient to permit optimum program effectiveness.

Staffing is inadequate to meet the needs of this program effectively.

11. Facilities Average Score 2.25

5	4	3	2	1
---	---	---	---	---

Present facilities are sufficient to support a high quality program.

Present facilities are a major problem for program quality.

12. Scheduling of Instructional Facilities

Average Score 4.5

5	4	3	2	1
---	---	---	---	---

Scheduling of facilities and equipment for this program is planned to maximize use and be consistent with quality instruction.

Facilities and equipment for this are significantly under-or-over scheduled.

13. Equipment

Average Score 2.5

5	4	3	2	1
---	---	---	---	---

Present equipment is sufficient to support a high quality program.

Present equipment is not adequate and represents a threat to program quality.

14. Adaption of Instruction

Average Score 4.0

5	4	3	2	1
---	---	---	---	---

Instruction in all courses required for this program recognizes and responds to individual student interests, learning styles, skills, and abilities through a variety of instructional methods (such as, small group or individualized instruction, laboratory or "hands on" experiences, credit by examination).

Instructional approaches in this program do no consider individual student differences.

15. Adequate and Availability of Instructional Materials and Supplies

Average Score 3.5

5	4	3	2	1
---	---	---	---	---

Faculty rate that the instructional materials and supplies as being readily available and in sufficient quantity to support quality instruction.

Faculty rate that the instructional materials are limited in amount, generally outdated, and lack relevance to program and student needs.