



Labor Market Analysis for Program Recommendation

Ecological Horticulture Occupations

Monterey Peninsula College

Prepared by the San Francisco Bay Center of Excellence for Labor Market Research
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Recommendation

Based on all available data, there appears to be an “undersupply” of Ecological Horticulture workers compared to the demand for this cluster of occupations in the Bay region and in the SC-Monterey sub-region (Monterey, San Benito, Santa Cruz counties). There is a projected annual gap of about 16,034 students in the Bay region and 1,872 students in the SC-Monterey Sub-Region.

Introduction

This report provides student outcomes data on employment and earnings for TOP 0109.00 Horticulture programs in the state and region. It is recommended that these data be reviewed to better understand how outcomes for students taking courses on this TOP code compare to potentially similar programs at colleges in the state and region, as well as to outcomes across all CTE programs at Monterey Peninsula College and in the region.

This report profiles Ecological Horticulture Occupations in the 12 county Bay region and in the SC-Monterey sub-region for a regional program recommendation at Monterey Peninsula College.

- **First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers (37-1012):** Directly supervise and coordinate activities of workers engaged in landscaping or groundskeeping activities. Work may involve reviewing contracts to ascertain service, machine, and workforce requirements; answering inquiries from potential customers regarding methods, material, and price ranges; and preparing estimates according to labor, material, and machine costs.
Entry-Level Educational Requirement: High school diploma or equivalent
Training Requirement: None
Percentage of Community College Award Holders or Some Postsecondary Coursework: 30%
- **Landscaping and Groundskeeping Workers (37-3011):** Landscape or maintain grounds of property using hand or power tools or equipment. Workers typically perform a variety of tasks, which may include any combination of the following: sod laying, mowing, trimming, planting, watering, fertilizing, digging, raking, sprinkler installation, and installation of mortarless segmental concrete masonry wall units. Excludes “Farmworkers and Laborers, Crop, Nursery, and Greenhouse” (45-2092).
Entry-Level Educational Requirement: No formal educational credential
Training Requirement: Short-term on-the-job training
Percentage of Community College Award Holders or Some Postsecondary Coursework: 20%
- **Farmworkers and Laborers, Crop, Nursery, and Greenhouse (45-2092):** Manually plant, cultivate, and harvest vegetables, fruits, nuts, horticultural specialties, and field crops. Use hand tools, such as shovels, trowels, hoes, tampers, pruning hooks, shears, and knives. Duties may include tilling soil and applying fertilizers; transplanting,

weeding, thinning, or pruning crops; applying pesticides; or cleaning, grading, sorting, packing, and loading harvested products. May construct trellises, repair fences and farm buildings, or participate in irrigation activities. Excludes “Graders and Sorters, Agricultural Products” (45-2041) and “Forest, Conservation, and Logging Workers” (45-4011 through 45-4029).

Entry-Level Educational Requirement: No formal educational credential

Training Requirement: Short-term on-the-job training

Percentage of Community College Award Holders or Some Postsecondary Coursework: 14%

Occupational Demand

Table 1. Employment Outlook for Ecological Horticulture Occupations in Bay Region

Occupation	2020 Jobs	2025 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	4,006	4,159	153	4%	2,526	505	\$20	\$52
Landscaping and Groundskeeping Workers	35,052	36,402	1,350	4%	27,215	5,443	\$14	\$40
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	54,037	56,023	1,985	4%	50,732	10,146	\$11	\$32
Total	93,095	96,584	3,489	4%	80,473	16,094		

Source: EMSI 2021.3

Bay Region includes: Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma Counties

Table 2. Employment Outlook for Ecological Horticulture Occupations in SC-Monterey Sub-region

Occupation	2020 Jobs	2025 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	698	738	40	6%	458	92	\$20	\$51
Landscaping and Groundskeeping Workers	5,634	5,957	322	6%	4,518	904	\$14	\$41
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	4,985	4,980	-4	-0%	4,479	896	\$11	\$28
Total	11,317	11,675	358	3%	9,455	1,892		

Source: EMSI 2021.3

SC-Monterey Sub-Region includes: Monterey, San Benito, Santa Cruz Counties

Job Postings in Bay Region and SC-Monterey Sub-Region

Table 3. Number of Job Postings by Occupation for latest 12 months (Mar 2021 - Feb 2022)

Occupation	Bay Region	SC-Monterey
Landscaping and Groundskeeping Workers	2,933	290
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	397	24

Occupation	Bay Region	SC-Monterey
Farmworkers and Laborers, Crop	295	39
Nursery Workers	27	1

Source: Burning Glass

**Table 4a. Top Job Titles for Ecological Horticulture Occupations for latest 12 months (Mar 2021 - Feb 2022)
Bay Region**

Title	Bay	Title	Bay
Groundskeeper	243	Landscape Foreman	42
Landscaper	197	Picker	39
Gardener	106	Groundsman	36
Irrigation Technician	102	Groundskeeper/Porter	35
Landscape Laborer	61	Porter/Groundskeeper	35
Landscape Gardener	57	Janitor/Groundskeeper	33
Greenskeeper	49	Landscape Construction Foreman	33
Enhancement Landscape Laborer	46	Landscape Technician	31
Landscaping Crew Leader	46	Yard Crew Member	31

Source: Burning Glass

**Table 4b. Top Job Titles for Ecological Horticulture Occupations for latest 12 months (Mar 2021 - Feb 2022)
SC-Monterey Sub-Region**

Title	SC-Monterey	Title	SC-Monterey
Landscaper	33	Landscape Laborer	5
Groundskeeper	24	Greenhouse Supervisor	4
Yard Crew Member	15	Greenskeeper I	4
Greenskeeper	14	Groundskeeper/Gardener	4
Irrigation Technician	10	Grower	4
Gardener	8	Landscape Foreman	3
Grounds Maintenance	6	Landscape Grounds Supervisor	3
Groundskeeper/Porter	6	Landscape Installation Crew	3
Greenhouse Technician	5	Landscape Labor	3

Source: Burning Glass

Industry Concentration

Table 5. Industries hiring Ecological Horticulture Workers in Bay Region

Industry – 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2020)	Jobs in Industry (2025)	% Change (2020-25)	% Occupation Group in Industry (2020)
Landscaping Services	27,698	28,488	3%	31%
Farm Labor Contractors and Crew Leaders	21,288	22,757	7%	24%
Crop Production	10,981	10,534	-4%	12%
Postharvest Crop Activities (except Cotton Ginning)	9,427	10,500	11%	11%
Local Government, Excluding Education and Hospitals	2,350	2,452	4%	3%
Farm Management Services	2,208	2,147	-3%	2%
Crop Harvesting, Primarily by Machine	1,691	1,541	-9%	2%
Soil Preparation, Planting, and Cultivating	1,363	1,610	18%	2%
Wineries	1,177	1,066	-9%	1%
Private Households	816	848	4%	1%

Source: EMSI 2021.3

Table 6. Top Employers Posting Ecological Horticulture Occupations in Bay Region and SC-Monterey Sub-Region (Mar 2021 - Feb 2022)

Employer	Bay	Employer	SC-Monterey
Brightview	155	University of California	9
Brightview Landscape Services	74	A Tool Shed Incorporated	9
Brightview Landscapes	64	Aramark	8
Cagwin Dorward	58	Greystar	6
Greystar	45	Santa Lucia Preserve	5
Landcare	39	Pebble Beach Resorts	5
University Of California	36	Kd Landscaping	5
Fpi Management Incorporated	34	Hyatt	5
Trugreen	30	Smith Gardens	4
ServiceMaster	30	Kd Landscaping Incorporated	4

Source: Burning Glass

Educational Supply

There are eight (8) community colleges in the Bay Region issuing 60 awards on average annually (last 3 years ending 2018-19) on TOP 0109.00 Horticulture. In the SC-Monterey Sub-Region, there are two (2) community colleges that issued 20 awards on average annually (last 3 years) on this TOP code.

Table 7. Community College Awards on TOP 0109.00 Horticulture in Bay Region

College	Subregion	Associate	Certificate Low	Total
Cabrillo	SC-Monterey	7	9	16
Diablo Valley	East Bay	0	8	8
Foothill	Silicon Valley	8	6	14
Las Positas	East Bay	0	1	1
Merritt	East Bay	0	9	9
Monterey	SC-Monterey	1	3	4
San Francisco	Mid-Peninsula	1	0	1
Solano	North Bay	2	5	7
Total		19	41	60

Source: Data Mart

Note: The annual average for awards is 2016-17 to 2018-19.

Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 16,094 annual openings for the Ecological Horticulture occupational cluster and 60 annual (3-year average) awards for an annual undersupply of 16,034 students. In the SC-Monterey Sub-Region, there is also a gap with 1,892 annual openings and 20 annual (3-year average) awards for an annual undersupply of 1,872 students.

Student Outcomes

Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0109.00 Horticulture

Metric Outcomes	Bay All CTE Programs	Monterey Peninsula All CTE Programs	State 0109.00	Bay 0109.00	SC-Monterey 0109.00	Monterey Peninsula 0109.00
Students with a Job Closely Related to Their Field of Study	74%	75%	72%	72%	92%	N/A
Median Annual Earnings for SWP Exiting Students	\$47,419	\$69,488	\$33,442	\$39,879	\$32,456	\$37,631
Median Change in Earnings for SWP Exiting Students	23%	11%	21%	19%	23%	18%
Exiting Students Who Attained the Living Wage	52%	70%	46%	45%	33%	67%

Source: Launchboard Strong Workforce Program Median of 2017 to 2020.

Skills, Certifications and Education

Table 9. Top Skills for Ecological Horticulture Occupations in Bay Region (Mar 2021 - Feb 2022)

Skill	Posting	Skill	Posting
Repair	985	Budgeting	198

Skill	Posting	Skill	Posting
Irrigation Systems	725	Occupational Health & Safety	196
Cleaning	652	Irrigation (Agriculture)	181
Debris and Litter Control	449	Customer Contact	174
Lifting Ability	427	Herbicides	171
Fertilizers	418	Power Saws	162
Power Tools	398	Carpentry	157
Hand Tools	361	Plumbing	134
Scheduling	297	Forklift Operation	132
Machinery	290	Masonry	124
Customer Service	288	Supervisory Skills	111
Landscaping	213	Predictive / Preventative Maintenance	109
Painting	202	Weed Eaters	104
Personal Protective Equipment (PPE)	201	Vaccination	102

Source: Burning Glass

Table 10. Certifications for Ecological Horticulture Occupations in Bay Region (Mar 2021 - Feb 2022)

Certification	Posting	Certification	Posting
Driver's License	1,750	Food Handler Certification	7
Certified Pest Control	68	CDL Class A	7
Cdl Class C	48	Bio-Hazard Certification	7
First Aid Cpr Aed	40	Backflow Prevention Certification	7
Certified Arborist	25	Leadership In Energy And Environmental Design (LEED) Certified	6
Contractors License	18	Project Management Certification	5
Cdl Class B	16	Occupational Safety and Health Administration Certification	5
Applicators License	16	Master Gardener Certification	5
Certified Applicator	14	Food Service Certification	4
OSHA Forklift Certification	12	Certified Landscape Technician	4

Source: Burning Glass

Note: 49% of records have been excluded because they do not include a certification. As a result, the chart above may not be representative of the full sample.

Table 11. Education Requirements for Ecological Horticulture Occupations in Bay Region

Education (minimum advertised)	Latest 12 Mos. Postings	Percent 12 Mos. Postings
High school or vocational training	771	93%
Associate's degree	40	5%
Bachelor's degree and higher	20	2%

Source: Burning Glass

Note: 77% of records have been excluded because they do not include a degree level. As a result, the chart above may not be representative of the full sample.

Methodology

Occupations for this report were identified by use of skills listed in O*Net descriptions and job descriptions in Burning Glass. Labor demand data is sourced from Economic Modeling Specialists International (EMSI) occupation data and Burning Glass job postings data. Educational supply and student outcomes data is retrieved from multiple sources, including CTE Launchboard and CCCCCO Data Mart.

Sources

O*Net Online
Labor Insight/Jobs (Burning Glass)
Economic Modeling Specialists International (EMSI)
CTE LaunchBoard www.calpassplus.org/Launchboard/
Statewide CTE Outcomes Survey
Employment Development Department Unemployment Insurance Dataset
Living Insight Center for Community Economic Development
Chancellor's Office MIS system

Contacts

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