

# Agricultural and Environmental Systems Career Field In-Demand Jobs Data

The Agricultural and Environmental Systems Career Field prepares students for careers in Agribusiness and Production Systems, Animal Science and Management, Bioscience, Horticulture, Natural Resource Management and Power Technology. The list of careers used in the figures below can be found in the Appendix.

**Figure 1.**  
Projected Growth of Agricultural and Environmental Systems Jobs in Ohio (2031)

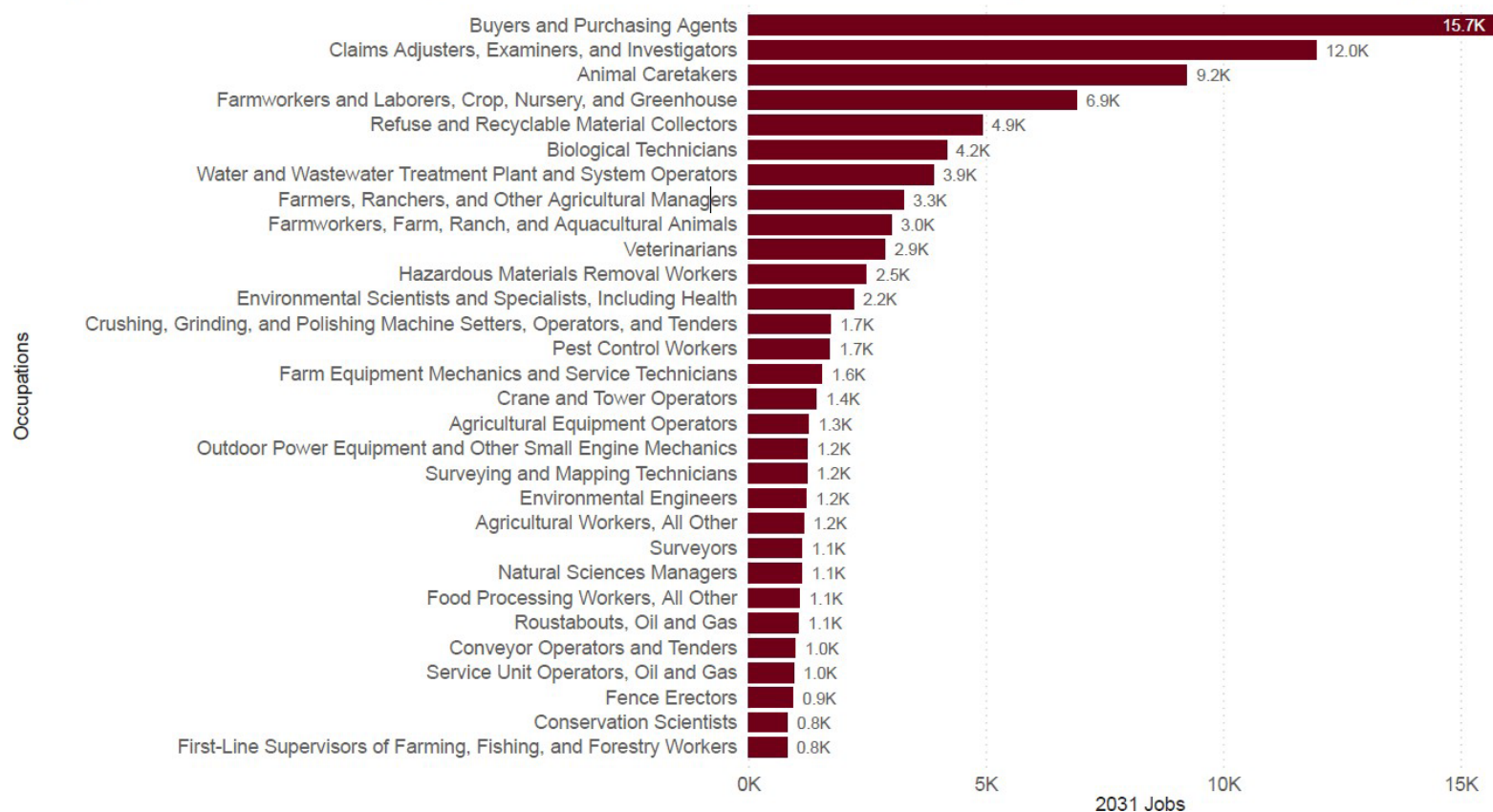


Figure 1 shows the highest in-demand occupations projected for 2031 in the Agricultural and Environmental Systems career field, with buyers and purchasing agents topping the list with over 15,000 jobs in Ohio.

**Figure 2.**

### Projected Growth of Agricultural and Environmental Systems Jobs in Ohio (2021-2031)

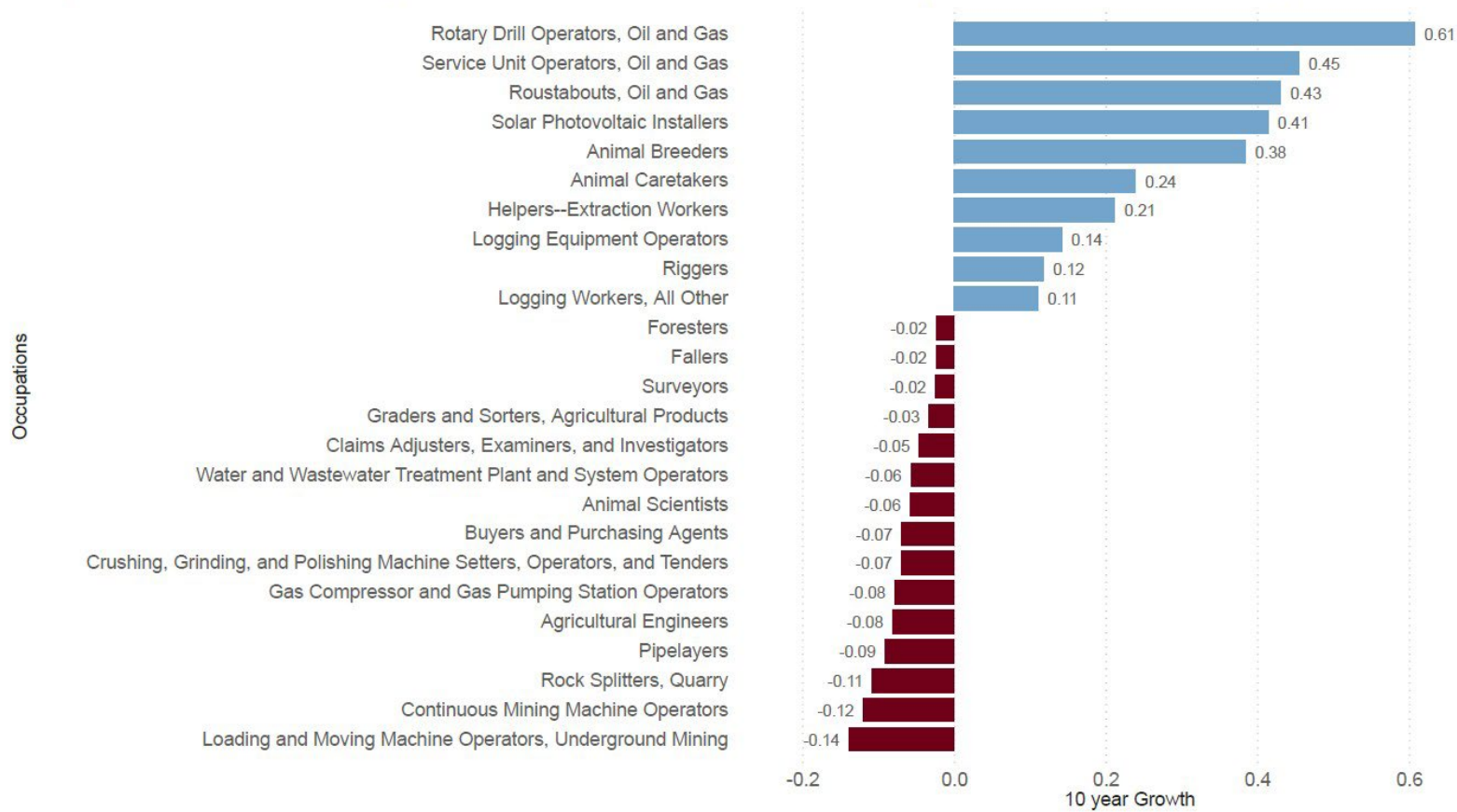


Figure 2 demonstrates the projected growth over the next ten years as a percentage. The blue represents positive growth, with the highest projected growth of 61% in rotary drill operators, oil and gas. The red represents negative growth or a decrease in the number of jobs, with the greatest expected decrease in loading and moving machine operators, underground mining.

Figure 3.

## Top Companies for Agricultural and Environmental Systems Jobs in Ohio

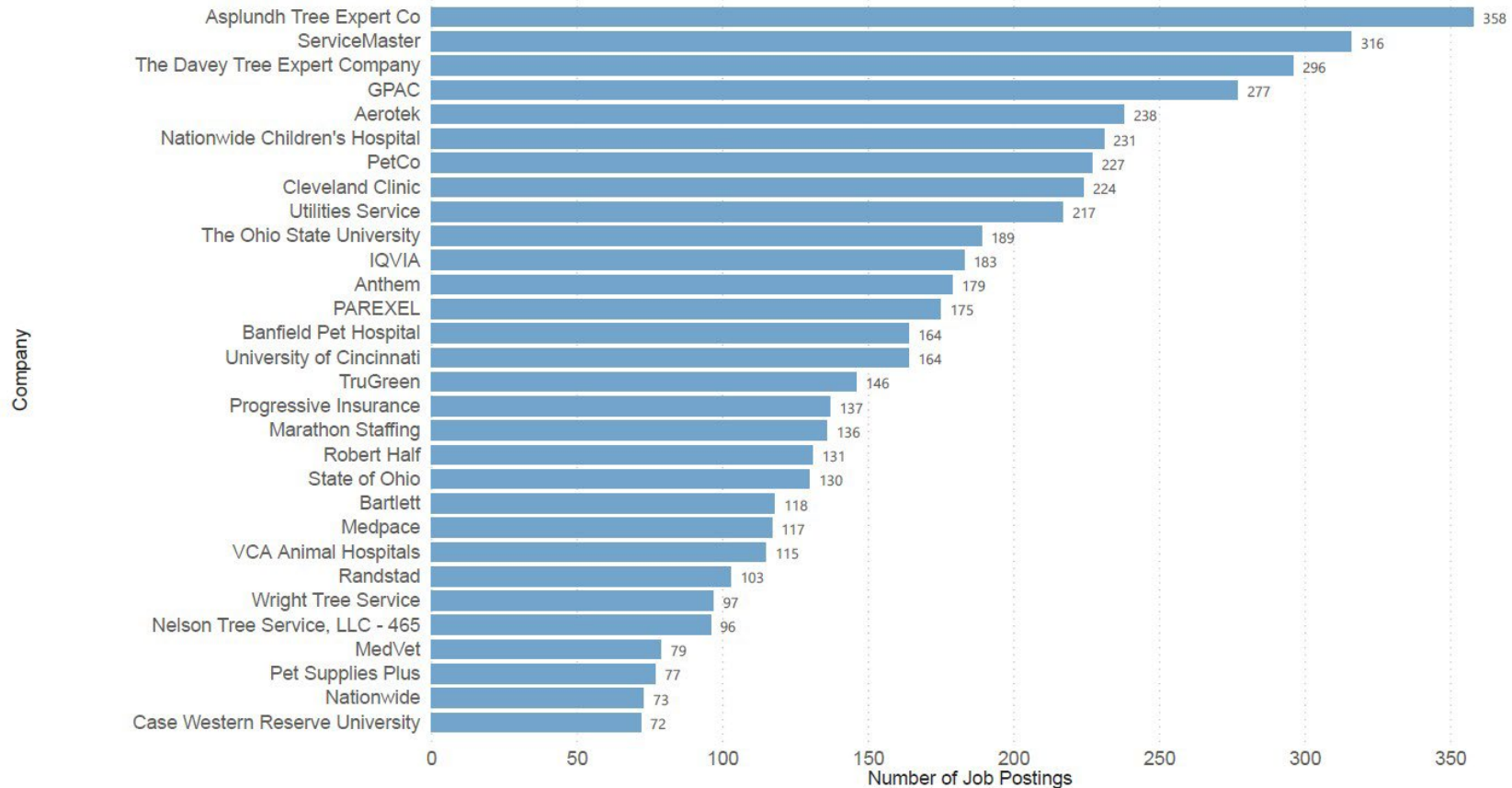


Figure 3 shows the top companies hiring in the agricultural and environmental systems career field over a one-year period (October 2020- October 2021). There was a total of 11,896 agricultural and environmental systems job postings during this time period, with the highest number from Asplundh Tree Expert Company at 358.

Figure 4.

## Demand and Supply of Agricultural and Environmental Systems Jobs in Ohio

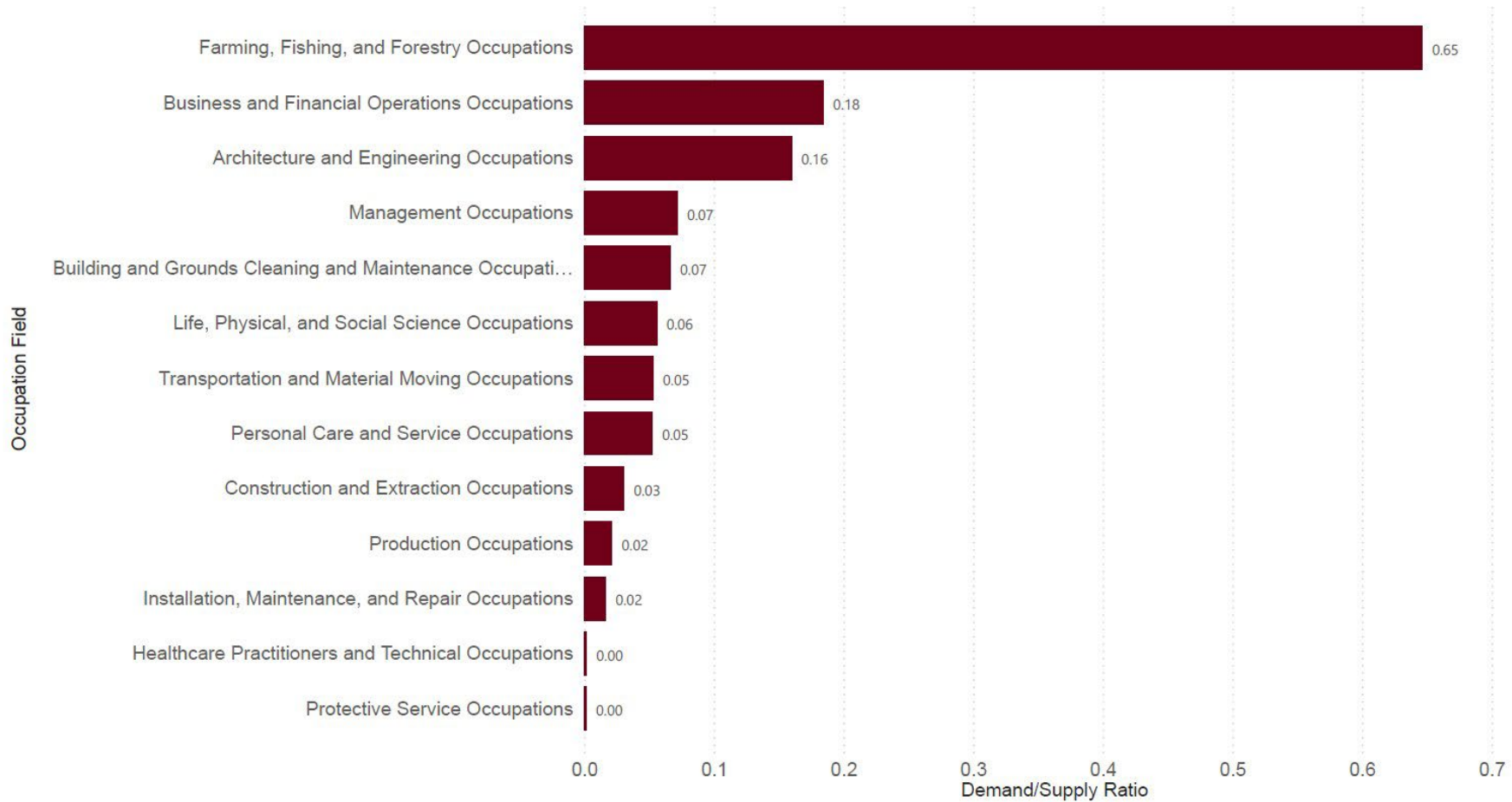


Figure 4 shows the demand and supply ratio for different areas in the career field. The ratio is calculated using the formula, job openings divided by the sum of graduates and those unemployed in the field [Ratio=  $\text{Openings}/(\text{Graduates}+\text{Unemployed})$ ]. A ratio of one or greater demonstrates a potential undersupply and less than one shows a sufficient supply. All areas of the agricultural and environmental systems career field are in sufficient supply; therefore, Ohio does not expect a labor shortage in this career field in coming years.

Figure 5.

## Demand for Hard Skills for Agricultural and Environmental Systems Jobs in Ohio

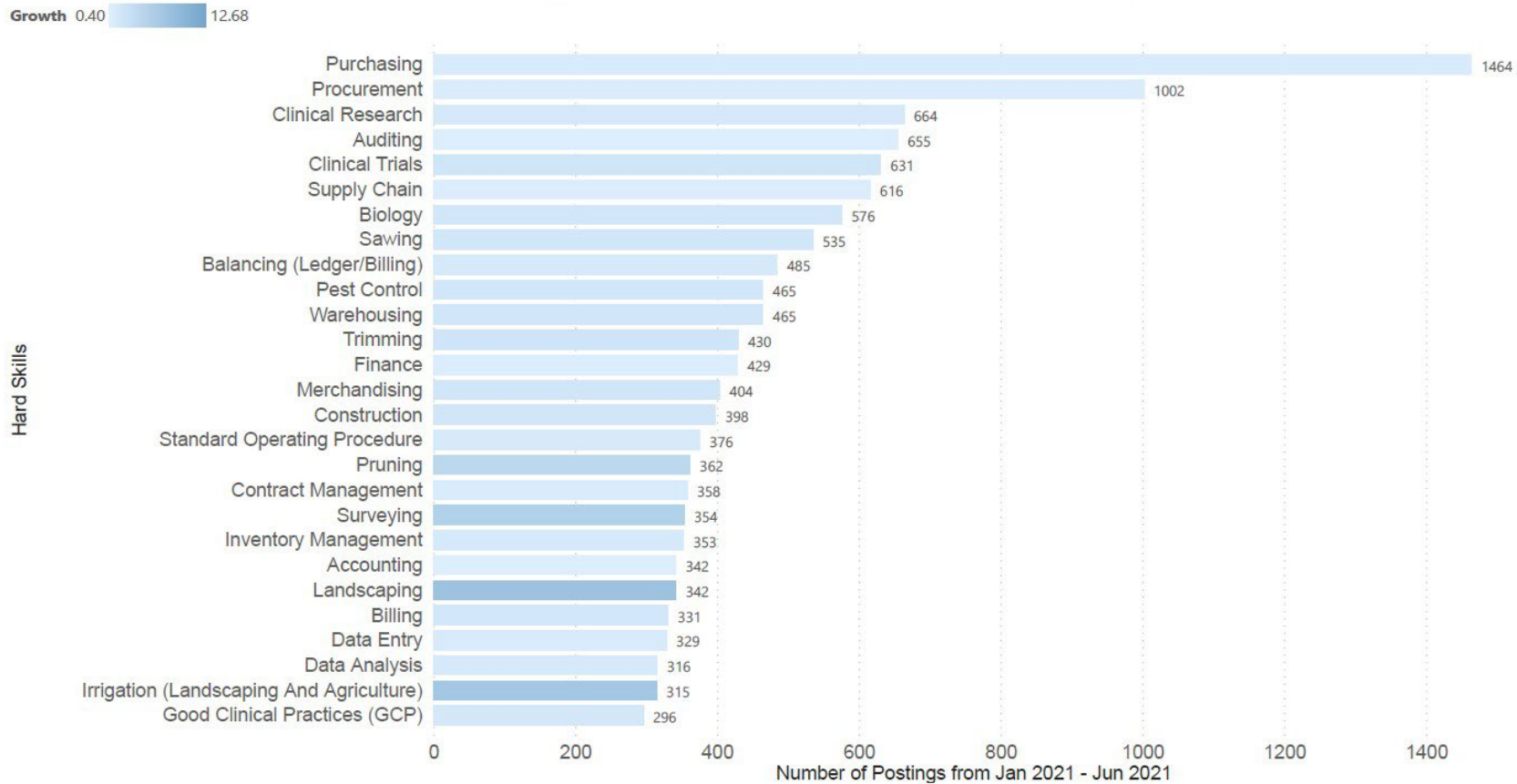


Figure 5 shows the top 27 in-demand hard skills employers are looking for in agricultural and environmental systems jobs, with the top skill being purchasing. Additionally, the darker blue demonstrates skills that have seen a greater increase in demand from 2017 to 2021. The greatest increase in demand is in landscaping at 7.77%.

Figure 6.

## Demand for Soft Skills in Agricultural and Environmental Systems Jobs in Ohio

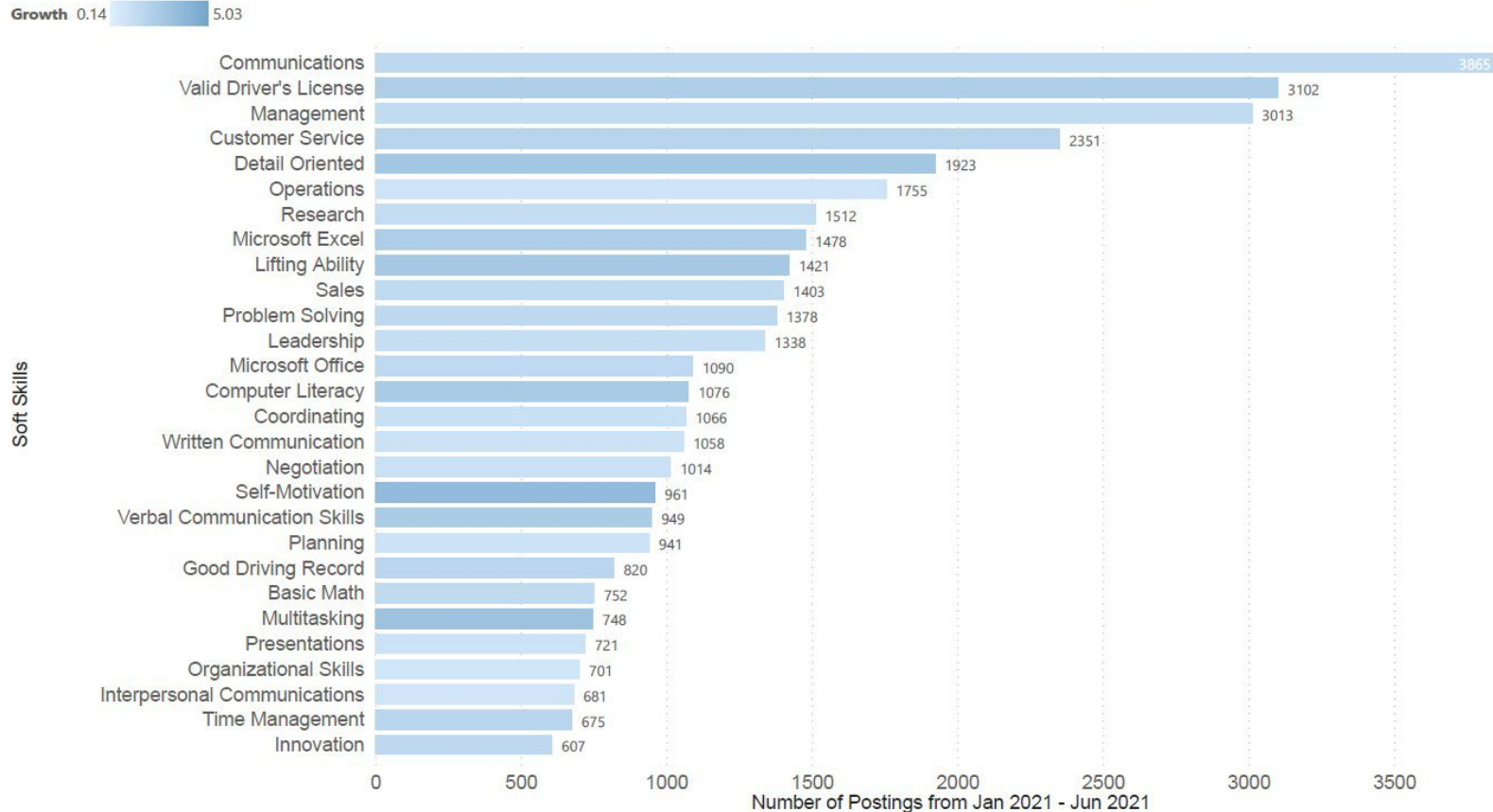


Figure 6 shows the top 28 in-demand soft skills employers are looking for in agricultural and environmental systems jobs. The top skill is communications, which appeared in almost 4,000 job postings between January 2021 and June 2021. Additionally, the darker blue demonstrates skills that have seen a greater increase in demand from 2017 to 2021. The greatest increase in demand is in self-motivation and multitasking at 3.48% and 3.07%, respectively.

## Appendix.

| Standard Occupation Classification (SOC) | Title  |
|--|--|
| 11-9013.00                               | Farmers, Ranchers, and Other Agricultural Managers               |
| 11-9121.00                               | Natural Sciences Managers  |
| 13-1028                                  | Buyers and Purchasing Agents                                     |
| 13-1031                                  | Claims Adjusters, Examiners, and Investigators                   |
| 17-1022                                  | Surveyors  |
| 17-2021                                  | Agricultural Engineers   |
| 17-2081                                  | Environmental Engineers  |
| 17-3025                                  | Environmental Engineering Technologists and Technicians          |
| 17-3031                                  | Surveying and Mapping Technicians                                |
| 19-1011                                  | Animal Scientists  |
| 19-1012                                  | Food Scientists and Technologists                                |
| 19-1013                                  | Soil and Plant Scientists  |
| 19-1023                                  | Zoologists and Wildlife Biologists                               |
| 19-1029                                  | Biological Scientists, All Other                                 |
| 19-1031                                  | Conservation Scientists  |
| 19-1032                                  | Foresters  |
| 19-2041                                  | Environmental Scientists and Specialists, Including Health       |
| 19-3091                                  | Anthropologists and Archeologists                                |
| 19-4011                                  | Agricultural and Food Science Technicians                        |
| 19-4021                                  | Biological Technicians   |
| 19-4045                                  | Geological and Hydrologic Technicians                            |
| 19-4071                                  | Forest and Conservation Technicians                              |
| 29-1131                                  | Veterinarians  |
| 33-2022                                  | Forest Fire Inspectors and Prevention Specialists                |
| 37-2021                                  | Pest Control Workers   |
| 37-3012                                  | Pesticide Handlers, Sprayers, and Applicators, Vegetation        |
| 37-3013                                  | Tree Trimmers and Pruners  |
| 37-3019                                  | Grounds Maintenance Workers, All Other                           |
| 39-2021                                  | Animal Caretakers  |
| 45-1011                                  | First-Line Supervisors of Farming, Fishing, and Forestry Workers |
| 45-2021                                  | Animal Breeders  |

|         |   |
|---------|---|
| 45-2041 | Graders and Sorters, Agricultural Products  |
| 45-2091 | Agricultural Equipment Operators  |
| 45-2092 | Farmworkers and Laborers, Crop, Nursery, and Greenhouse   |
| 45-2093 | Farmworkers, Farm, Ranch, and Aquacultural Animals  |
| 45-2099 | Agricultural Workers, All Other   |
| 45-4011 | Forest and Conservation Workers   |
| 45-4021 | Fallers   |
| 45-4022 | Logging Equipment Operators   |
| 45-4023 | Log Graders and Scalers   |
| 45-4029 | Logging Workers, All Other  |
| 47-2151 | Pipelayers  |
| 47-2231 | Solar Photovoltaic Installers   |
| 47-4031 | Fence Erectors  |
| 47-4041 | Hazardous Materials Removal Workers   |
| 47-5012 | Rotary Drill Operators, Oil and Gas   |
| 47-5013 | Service Unit Operators, Oil and Gas   |
| 47-5022 | Excavating and Loading Machine and Dragline Operators, Surface Mining                               |
| 47-5041 | Continuous Mining Machine Operators   |
| 47-5044 | Loading and Moving Machine Operators, Underground Mining  |
| 47-5051 | Rock Splitters, Quarry  |
| 47-5071 | Roustabouts, Oil and Gas  |
| 47-5081 | Helpers--Extraction Workers   |
| 47-5097 | Earth Drillers, Except Oil and Gas; and Explosives Workers, Ordnance Handling Experts, and Blasters |
| 47-5098 | Underground Mining Machine Operators and Extraction Workers, All Other                              |
| 49-3041 | Farm Equipment Mechanics and Service Technicians  |
| 49-3053 | Outdoor Power Equipment and Other Small Engine Mechanics  |
| 49-9096 | Riggers   |
| 51-3099 | Food Processing Workers, All Other  |
| 51-8031 | Water and Wastewater Treatment Plant and System Operators   |
| 51-9021 | Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders                           |
| 53-7011 | Conveyor Operators and Tenders  |
| 53-7021 | Crane and Tower Operators   |
| 53-7031 | Dredge Operators  |



|         |  |
|---------|--|
| 53-7071 | Gas Compressor and Gas Pumping Station Operators |
| 53-7081 | Refuse and Recyclable Material Collectors        |