Standard Operating Procedures (SOPs)

Twenty-five standard operating procedures are associated with the Pacific Island Network landbird monitoring protocol. To accommodate frequent changes, each SOP is informally published online through the National Park Service Integrated Resources Management Applications (IRMA) portal (<https://irma.nps.gov/Portal>). The SOPs can be retrieved from IRMA using the citation or the hyperlinked reference code shown in Table SOP-1 below. Versioning tools in IRMA will offer the most current version from these links.

**Table SOP-1.** Titles, citations, and IRMA reference codes for all SOPs utilized for this protocol.

|  |  |  |
| --- | --- | --- |
| Title | Citation | IRMA Reference Code |
| **SOP #1**: Before the Field Season | Ainsworth A. (NPS), Akamine K. (NPS), and Gross J. (NPS). 2022. SOP #1: Before the Field Season. Version 2.01. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2294477](https://irma.nps.gov/DataStore/Reference/Profile/2294477) |
| **SOP #2**: Training Observers | Ainsworth A. (NPS) and Akamine K. (NPS). 2021. SOP #2: Training Observers. Version 1.02. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2265407](https://irma.nps.gov/DataStore/Reference/Profile/2265407) |
| **SOP #3**: Safety Protocol | Ainsworth A. (NPS) and Akamine K. (NPS). 2022. SOP #3: Before the Field Season. Version 2.0. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2265408](https://irma.nps.gov/DataStore/Reference/Profile/2265408) |
| **SOP #4**: Sanitation Protocol | Ainsworth A. (NPS) and Akamine K. (NPS). 2021. SOP #4: Sanitation Protocol. Version 1.01. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2265409](https://irma.nps.gov/DataStore/Reference/Profile/2265409) |
| **SOP #5**: Generating Sampling Point Locations with GIS | Wasser M. (NPS) and Kichman S. (NPS). 2022. SOP #5: Generating Sampling Point Locations with GIS. Version 2.01. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2265410](https://irma.nps.gov/DataStore/Reference/Profile/2265410) |
| **SOP #6**: Using Garmin GPS Units | Wasser M. (NPS) and Kichman S. (NPS). 2022. SOP #6: Using Garmin GPS Units. Version 2.02. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2293723](https://irma.nps.gov/DataStore/Reference/Profile/2293723) |
| **SOP #7**: Downloading and Uploading Data from/to a Garmin® GPS | Wasser M. (NPS). 2022. SOP #7: Downloading and Uploading Data from/to a Garmin® GPS. Version 1.01. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2293344](https://irma.nps.gov/DataStore/Reference/Profile/2293344) |
| **SOP #8**: Using ArcGIS Field Maps Application | Wasser M. (NPS). 2022. SOP #8: Using ArcGIS Field Maps Application. Version 2.0. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2294268](https://irma.nps.gov/DataStore/Reference/Profile/2294268) |
| **SOP #9**: Establishing and Marking Vegetation Monitoring Plots | Ainsworth A. (NPS), Akamine K. (NPS), Gross J. (NPS), and Moore L. (NPS). 2021. SOP #9: Establishing and Marking Vegetation Monitoring Plots. Version 3.0. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2265413](https://irma.nps.gov/DataStore/Reference/Profile/2265413) |
| **SOP #10**: Conducting Community Vegetation Surveys | Ainsworth A. (NPS), Akamine K. (NPS), Gross J. (NPS), and Moore L. (NPS). 2022. SOP #10: Conducting Community Vegetation Surveys. Version 2.0. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2265414](https://irma.nps.gov/DataStore/Reference/Profile/2265414) |
| **SOP #11**: Using a Clinometer to Measure Height and Slope | Ainsworth A. (NPS). 2019. SOP #11: Using a Clinometer to Measure Height and Slope. Version 1.0. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2265415](https://irma.nps.gov/DataStore/Reference/Profile/2265415) |
| **SOP #12**: Collecting and Vouchering | Ainsworth A. (NPS) and Akamine K. (NPS). 2021. SOP #12: Collecting and Vouchering. Version 2.0. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2265416](https://irma.nps.gov/DataStore/Reference/Profile/2265416) |
| **SOP #13**: After the Field Season | Ainsworth A. (NPS). 2022. SOP #13: After the Field Season. Version 2.0. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2265417](https://irma.nps.gov/DataStore/Reference/Profile/2265417) |
| **SOP #14**: Workspace Setup and Project Records Management | Kozar K. (NPS) and Weisenborn K. (NPS). 2022. SOP #14: Workspace Setup and Project Records Management. Version 2.0. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2293335](https://irma.nps.gov/DataStore/Reference/Profile/2293335) |
| **SOP #15**: Datasheet Handling Procedures | Kozar K. (NPS) and Weisenborn K. (NPS). 2022. SOP #15: Datasheet Handling Procedures. Version 1.02. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2293336](https://irma.nps.gov/DataStore/Reference/Profile/2293336) |
| **SOP #16**: Managing Photographic Images | Gross J. (NPS), Kozar K. (NPS), and Weisenborn K. (NPS). 2022. SOP #16: Managing Photographic Images. Version 2.01. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2265420](https://irma.nps.gov/DataStore/Reference/Profile/2265420) |
| **SOP #17**: Data Entry and Verification | Kozar K. (NPS) and Weisenborn K. (NPS). 2022. SOP #17: Data Entry and Verification. Version 1.01. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2265421](https://irma.nps.gov/DataStore/Reference/Profile/2265421) |
| **SOP #18**: Post-season Data Quality Review and Certification | Kozar K. (NPS) and Weisenborn K. (NPS). 2020. SOP #18: Post-season Data Quality Review and Certification. Version 1.01. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2265422](https://irma.nps.gov/DataStore/Reference/Profile/2265422) |
| **SOP #19**: Metadata Development | Kozar K. (NPS) and Weisenborn K. (NPS). 2021. SOP #19: Metadata Development. Version 1.01. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2265423](https://irma.nps.gov/DataStore/Reference/Profile/2265423) |
| **SOP #20**: Sensitive Information Procedures | Kozar K. (NPS) and Weisenborn K. (NPS). 2021. SOP #20: Sensitive Information Procedures. Version 1.01. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2265424](https://irma.nps.gov/DataStore/Reference/Profile/2265424) |
| **SOP #21**: Product Delivery Specifications | Kozar K. (NPS) and Weisenborn K. (NPS). 2022. SOP #21: Product Delivery Specifications. Version 1.02. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2293337](https://irma.nps.gov/DataStore/Reference/Profile/2293337) |
| **SOP #22**: Product Posting and Distribution | Kozar K. (NPS) and Weisenborn K. (NPS). 2021. SOP #22: Product Posting and Distribution. Version 1.01. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2265426](https://irma.nps.gov/DataStore/Reference/Profile/2265426) |
| **SOP #23**: Statistical Data Analysis | Ainsworth A. (NPS). 2021. SOP #23: Statistical Data Analysis. Version 1.01. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2265427](https://irma.nps.gov/DataStore/Reference/Profile/2265427) |
| **SOP #24**: Reporting | Ainsworth A. (NPS). 2019. SOP #24: Reporting. Version 1.01. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2265428](https://irma.nps.gov/DataStore/Reference/Profile/2265428) |
| **SOP #25**: Revising the Protocol | Ainsworth A. (NPS). 2022. SOP #25: Revising the Protocol. Version 1.02. Pacific Island Network Focal Terrestrial Plant Communities Monitoring Protocol. Unpublished National Park Service Report, Pacific Island Inventory and Monitoring Network, Hawaii National Park, Hawaii. | [2294161](https://irma.nps.gov/DataStore/Reference/Profile/2294161) |