Code of Conduct McMurdo Dry Valleys ASMA: Day Trips

Located on Ross Island at Hut Point Peninsula is McMurdo Station, which serves as a transportation and logistics hub for the National Science Foundation-managed United States Antarctic Program.

Ross Island is also home to New Zealand's Scott Base and nine Antarctic Specially Protected Areas, each with its own management plan.

Approximately 50 miles northwest and across McMurdo Sound are the virtually ice-free McMurdo Dry Valleys, which were discovered in 1903 by British explorer Robert Falcon Scott.

The Dry Valley Antarctic Specially Managed Area (or ASMA) was the first ASMA to be officially recognized under the Protocol on Environmental Protection to the Antarctic Treaty.

In June, 2004, the Area was formally designated as a Specially Managed Area.

Managed Areas are used to assist in the planning and coordination of activities, to avoid conflicts and minimize environmental impacts.

Whether this is your first trip to this important Area or you are a frequent visitor, environmental responsibility is your primary priority.

Maintaining the ASMA in its natural state must take precedence.

The Antarctic Specially Managed Area supports eleven established facilities and many tent camps each season.

Established facilities include camps at Lake Hoare, Lake Bonney, Lake Fryxell, New Harbor, F-6, Bull Pass, Marble Point Refueling Station, Lake Vanda, Lower Wright Valley, the radio repeater stations at Mt. Newall and Cape Roberts.

The McMurdo Dry Valleys ecosystem contains geological and biological features that are thousands and, in some cases, millions of years old.

Microscopic life in the Dry Valleys constitute some of the most fragile and unique ecological communities on Earth.

Life thrives here despite severe cold, lack of water and nutrients.

This ancient desert landscape and its biological communities have very little natural ability to recover from human disturbance, even seemingly small disturbances.

As a result, many of the features could be easily and irreversibly damaged by our actions.

To protect and preserve the areas, research in the Valleys must aim to minimize impacts on land, water and ice.

The Management Plan for the Area establishes zones to enable distinction between living areas, science areas and tourist areas. These are:

- Facility Zones
- Scientific Zones
- Restricted Zones and
- Visitor Zones

Refer to the Code of Conduct for general behavior and specific guidelines for each of the zones.

Each permanent camp has a Facility Zone which sets the perimeter for primary human activity at the camp.

The zone allows easy movement within the camp area and contains the helicopter landing areas, established tents sites and fixed building sites.

In 2011, Two Scientific Zones and Eight Restricted Zones were defined within the plan for the Dry Valley ASMA.

The Scientific Zones include Boulder Pavement in Wright Valley and Explorers Cove in the Taylor Valley.

Long-term studies are underway at both of these sites.

The Restricted Zones were established to limit visits to the areas that are particularly sensitive to human disturbance.

They include: Trough Lake Catchment in the Royal Society Range, Mount Feather Sirius Deposits on Mt. Feather, Don Juan Pond, Argo Gully, Prospect Mesa and the Hart Ash deposit in the Wright Valley, The Sand Dunes in Victoria Valley and Battleship Promontory in the Convoy Range.

The Visitor Zone is located at the base of the Canada Glacier near Lake Fryxell Camp.

It is primarily used by the International Association of Antarctic Tour Operators.

Entry into the Scientific and Restricted zones must be part of your pre-approved science or work plan and also requires notification to the NSF Environmental Officer at the time of your visit.

As these are especially sensitive areas, take responsibility to know and follow the ASMA plan guidelines.

A special permit is required to enter an Antarctic Specially Protected Area or ASPA.

If your trip takes you in the vicinity of an ASPA, take precautions to stay outside of the Area.

The five Antarctic Specially Protected Areas found within the Dry Valleys Managed Area are:

ASPA 123, Barwick and Balham Valleys

ASPA 131, Canada Glacier

ASPA 138, Linnaeus Terrace

ASPA 154, Botany Bay

APSA 172, Blood Falls

Pocket Manuals with full text and maps of the Management Plan are available from your environmental department.

It is important that you carefully read the Code of Conduct and those parts of the Management Plan which relate to your activities.

Before your trip to the Dry Valleys, consider preventative measures to limit cross-contamination between sites.

Take precautions to minimize your presence at all sites.

Don't Pack a Pest – Clean all of your gear, ensuring it is soil and pest-free.

Brush boots and shoes to avoid transport of non-native organisms into the area.

When travelling between Lake Basins, Valleys and between camps, clean your boots again.

Pack a water bottle, human waste containers and hand sanitizers.

Carry extra containers for collecting your lunch scraps, papers, cigarette butts and other waste.

Avoid releases by keeping your items secure.

Specific practices vary from site to site, depending on the type of equipment and experiments at each camp.

When you arrive at any camp in the Dry Valleys, review camp protocol with people on- site or with your teammates.

Maps of the facility zones are available at fixed facilities.

The guidelines for personal behavior are easy to understand:

Carry a radio and hike responsibly.

Be aware that footsteps can damage the fragile microorganisms at the soil surface.

Vulnerable salt deposits and microscopic communities that live in the rocks are valuable records of climate change and should not be disturbed.

Avoid sliding down scree slopes or sand dunes, as these features have taken many thousands of years to form and contain surface deposits of major scientific importance.

Water features such as lakes, streams and glaciers are sensitive, interconnected areas and have a regional influence on microbial ecosystems.

These features are very vulnerable to human activity, especially accumulation of contaminants.

Stay a good distance from stream sides.

Walking too close may adversely affect the bank stability, which could disrupt the flow pattern of the stream.

Mummified seals and penguins should not be disturbed.

Apart from the importance of leaving them in place, they may contain diseases.

Take plenty of photographs but do not move or collect artefacts, fossils, rocks or wind eroded and shaped ventifacts.

Some of the fixed facilities incorporate the use of ATVs, carts, watercraft and trailers.

Specific guidelines have been established for each type of equipment.

Use them only if you are approved to do so and have reviewed and understand the procedure for operation.

If you are visiting the Area for the day, you will most likely be in an established camp.

However, there may be times when a landing is required at a remote location.

Please remember that your department or science group will be asked for an Environmental End of Season Report, so keep a log of all activities while visiting.

Activities that require reporting with GPS coordinates include:

Helicopter landings outside of a facility zone – in other words, in an area outside of those meant to contain human activity.

Any releases or spills of designated pollutants that happen during your visit.

These must be reported, cleaned up, bagged and returned to station.

Any items that need to be left in the field, including those that have permission for them to winter-over.

Be prepared for departure prior to your requested pickup time.

Leave clean and organized areas behind when you depart.

Much of the current knowledge of terrestrial ecosystems and landscape processes are based on discoveries made in the natural laboratory of the McMurdo Dry Valleys.

A broad view of the scientific value of the Area is required to fully appreciate the multitude of studies conducted here.

Your understanding of the human impact upon the natural processes in the Dry Valley ASMA will help you make informed decisions while in the Area.

Well-planned and executed visits that minimize environmental impacts and will help preserve this unique wilderness landscape for future generations.