

DeTour Reef Light Preservation Society Keeper's Handbook

INTRODUCTION:

Built in 1931, 4,050 feet South East from the onshore light station, the DeTour Reef Light (DRL) is a unique steel-framed square tower of three distinct levels in Classical Revival architectural styling. Sitting on a unique concrete (crib) platform that rises 20 feet above the surface of the water, the 63-foot high lighthouse, is painted white with a red roof. The lighthouse was manned from 1931 until the light was automated in 1974. Due to more sophisticated navigational equipment aboard ships, and the massive conversion to unmanned automated beacons, along with insufficient operating funds, the Coast Guard rendered DeTour Reef Lighthouse obsolete in 1997. DRLPS had a 20-year lease on DRL, and transfer of ownership from the Government to DRLPS in accordance with the National Historic Lighthouse Preservation Act occurred on June 17, 2010. DeTour Reef Light received the 2005 Michigan Governor's award for Historic Restoration and the 2006 Superior Award from the Historical Society of Michigan. In 2010 First Lady Michelle Obama designated DRLPS a "Preserve America Steward" in recognition of the restoration of DRL and our Tour and Keeper programs. DeTour Reef Light is listed on the National Registrar of Historic Places.

As a Keeper, you are joining many other individuals whose commitment and dedication over the years have contributed to our success. Volunteers have spent thousands of hours restoring, protecting, and interpreting this irreplaceable part of Michigan history.

On the following pages, please find the scope of duties for the Keepers program as well as the specifics of the program. There is a fee to participate in the program and keepers are requested to become familiar with the history of DeTour Reef Light and the restoration. Keepers are encouraged to view the two DVD "Gateway to Superior: Saving the DeTour Reef Light" video which is available from the Society for \$16.00..

Keepers make it possible for many others to enjoy a visit to this historical site. This commitment is critical to continuing the restoration and preservation of DeTour Reef Lighthouse. Thank you for helping to keep the light shining.

SCOPE OF DUTIES:

The Keepers' primary areas of duty are:

- **Maintain electrical power system by fueling the generator daily as needed**
- **Ensuring operation of the water heater by checking the propane tanks and regulator daily, change tanks as required**
- Lighthouse cleaning.
- Occasional light maintenance.
- Maintain the Lighthouse Log including all events, visitors to DRL, descriptions of your experience, tour information, suggestions for changes to Tours and Keeper program, weather conditions, etc...
- Reporting unusual weather conditions to the National Weather Service in Gaylord by cell phone. (see directions in three ring binder "Instructions for lighthouse keepers").
- At the time of orientation, Keepers will be advised of specific duties for their assigned period.

WHAT'S HERE AND WHAT TO BRING:

The living quarters are furnished and the kitchen is equipped with a 2-burner cook top, a 9 cubic foot refrigerator and freezer, microwave, coffee maker, toaster oven, dishes, glass ware, utensils, pots and pans. There are also several folding canvas chairs for use on the decks and a small barbeque grill (may need to bring self-lighting charcoal). Toilet paper is provided, *paper towels are not*.

We encourage all keepers to bring cell phones and to provide those numbers to DRLPS—at least one keeper **MUST** have a cell phone. Cameras and binoculars are always useful.

Keepers provide all their own food, beverages, soap, shampoo, and other personal items. You will also

need to bring a sleeping bag (or sheets and blanket), pillow cases, towels and wash cloths. This will avoid the cost of laundering linens and enable us to keep our charge for the program at a minimum. We do have linens, blankets, and pillows on the beds at the lighthouse for decorative purposes. *If you choose to use the pillows, please bring your own pillowcases.*

Children who might “wet the bed” should sleep on the floor on keeper provided air mattresses or sleeping pads.

Everything you bring must be loaded in the charter boat and hauled up the side of the lighthouse with ropes. Soft sided duffels are great as are tote bags with good handles and small cooler chests with sturdy handles. Large heavy-duty garbage bags also work well for pillows, clothing, and sleeping bags. Avoid paper bags and cardboard boxes as these don't do well if they get wet and tend to fall apart when being hauled up the side of the lighthouse. Please do not over pack. A few keepers have packed so much “stuff” that an expensive extra trip by the charter boat captain was required just to haul everything. The extra charter boat charges for the additional trip will be the responsibility of the keepers.

For meals, past keepers have found that the more they prepare in advance the more time they have for fun. Pre-made lasagna, pasta, salads have been favorites with the keepers. DRLPS encourages keepers to contact each other prior to the weekend and plan their menus together as a group. You should be able to read the email addresses of people in your group from the all-keeper emails that are sent out before and during the summer.

Keep in mind that weather conditions could make it unsafe to pick you up from the light on your scheduled departure day, so it's important to have adequate supplies for an extra day just in case.

ARRIVAL:

Before your arrival date, please advise the DRLPS Keeper Chairperson of when you will arrive in DeTour Village, where you will be staying the night before, and your cell phone numbers or other means to contact you. There are many accommodations nearby (<http://www.detourvillage.org/stay-with-us-1.html> and on Drummond Island (www.drummondislandchamber.com) The Society highly recommends should your schedule permit that you stop at the DeTour Passage Historical Museum (opened in afternoons) which is located next to the Ferry Dock in DeTour Village. This museum has the 3 1/2 order Fresnel lens and timing mechanism that was placed in the DeTour Point Lighthouse in 1909, relocated to DeTour Reef in 1931.

On your scheduled arrival date, please plan to arrive at the [DeTour State Harbor Marina](#) by **12:00 noon** unless otherwise directed. Parking is free, but ask in the harbor office for permission and instructions.

LIVING QUARTERS:

You will find the living quarters to be cozy and comfortable during your stay. The Keepers share the kitchen facilities, office, the living room, and the bathroom. There are two bedrooms, the keeper's with a double bed and the assistant's with two bunk beds. Each bedroom has a double dresser and chair

Bathroom notes: Hold the shower diverter valve up for several seconds until water pressure keeps it in place for a shower. Only human waste and toilet paper are to be flushed in the toilet. Other items will damage or destroy the sanitation system. Do not use soap, cleanser, or detergents to clean the toilet bowl. Just water and arm power with a non-abrasive scrubber or sponge.

The office: The office has a roll top desk, chair, bookcase, and a marine radio, which can be monitored on channel 16. There is a TV that can receive local channels, and DVD player. A generous collection of DVDs is on a bookshelf in the assistant keeper's room.

The office desk and bookcase contain useful and important information. Back Issues of our newsletter “Passages” are in the office. Several notebooks, including those with instructions for the mechanical

equipment on the lighthouse are in the bookcase, as are copies of this handbook. Reading material, puzzles, playing cards, and reference books are in the office. Many of the books and items on the lighthouse are the personal property of DRLPS members. Please enjoy this reading material, but make every effort to keep it in the condition that you found it.

Windows and Shutters: The exterior shutters on the deck level should be opened during your stay. The key to the pad locks is located on a key ring that is placed on top of the light switch box just inside the front door. On some of the locks, use the vice grips (clamped to the aluminum gear basket just inside and to the left of the front door) to hold the hasp as you close the lock.

In 2007, DRLPS added fabric screens for the windows that are attached with small disc magnets. The magnets are very powerful (and expensive) and electronic devices and magnetic media should not be located near them. Do not use pliers to remove the magnets – just slide them on to the glass or apart from each other. A metal window close assist device (looks like a cabinet handle) is kept on the window ledge of the dining room. To close windows, you will have to reach around the fabric screen and slide the closer between the frame of the window and the glass near where it catches the latch. This will enable you to pull the window closed. The lever device at the base of the window must be held up out of the detents to allow closure.

Swimming: Debris and rip-rap are located at the base of the lighthouse and could cause injury if one were to dive or jump from the lighthouse deck. Accordingly, if you go swimming, go down the vertical ladders on the sides of the lighthouse. For use during periods of low lake levels, a swimming ladder is stored on the gallery level and should be hooked to the lowest rung of the vertical ladders on the side of the lighthouse. Be sure to clip it to the lighthouse ladder rung or it will become detached and drift away by large waves from boats or freighters.

SELLING MEMORABILIA:

- Enter all details of Memorabilia sales (including size and color of clothing) and method of payment. For credit cards—enter name of purchaser, billing address, credit card number, expiration date and 3-digit security code from the back of the card. The sales record sheet, checks and cash should be placed in a regular envelope or zippered clear plastic envelope and given to the DRLPS team member who picks you up at your departure.
- When items are purchased on the lighthouse, the Society will pay the sales tax – giving the purchasers a 6% discount.
- If items are not available in the stock at the lighthouse, other than clothing, check with keeper chairperson for availability in DRLPS stock.
- U. S. Lighthouse Society “Passports” may be available for sale on the lighthouse. These are sold for \$10. A large rubber stamp and stamp pad are in the office for stamping the DeTour Reef Light imprint in the Passport. Some lighthouse tour visitors may already have a “Passport” so be sure to ask if they would like it stamped with the DeTour Reef Light impression. More information is found on page 3 of the spring 2007 issue of Passages (in the bookcase).
- Post cards sell for 50 cents each.
- The window next to the memorabilia table should be closed if there is any possibility of rain. A number of post cards and other items have been damaged or destroyed when this window was left open.

SEA GULL SOILING AND SCRUBBING THE DECK:

The lighthouse deck is subject to soiling by sea gulls, and maintaining the decks is a *daily maintenance task* that generations of lighthouse keepers before you were responsible for. It is also essential that the pier deck be cleaned of sea gull dropping prior to the arrival of the tour guests. The concrete deck had a rubberized coating that can be damaged easily. Extreme care must be used so that the coating is not damaged. The garden hose and brushes can be used to clean the deck

- Using the hose (located just inside the entrance doors, wet down the entire deck and keep it wet to soak for at least 20 minutes. This will soften the bird dirt. Start at the far corner of the deck

and work toward the entrance doors

- A stiff yellow brush on a long handle is used to remove the bird dirt which should be washed off the deck with the hose.
- *Do not spray the lighthouse sides, window openings, or shutters as it will freeze up the locks and wash away insecticide applied to kill the spiders!*

GENERAL MAINTENANCE & APPEARANCE: Please keep the entire lighthouse as neat and clean as possible during your stay and particularly during tours. On the day that you are scheduled to leave, please give your quarters a thorough cleaning and leave them in “move-in” condition for those that follow you. A vacuum and cleaning supplies are kept in the hall closet of the living quarters.

POWER SYSTEM:

The electrical power at the light is provided by a system similar to one found in larger campers and RVs. A gasoline generator outside on the deck charges a bank of batteries in the basement, and the batteries power a DC to AC inverter which converts the battery voltage to regular 120VAC residential power. The generator is controlled automatically and normally requires no keeper intervention, except for keeping it fueled. It is your responsibility to check the generator often, at least twice a day, to make sure it has adequate fuel. Normally you should try to add fuel when the generator is not running, but if you must add fuel during generator operation call Brad at 406-333-1010 for instructions. *Never turn the generator off using the key switch on the generator itself, except in an emergency! NEVER FUEL THE GENERATOR WHILE IT IS RUNNING!* You should expect the generator to run once a day for 4-5 hours, but it could be at any hour of the day or night depending on system utilization. See the video on fueling the generator on the DRLP website (<https://www.drlps.com/keeper-academy>).

WATER HEATER:

There is a propane powered water heater at the light, and there are two 30lb propane tanks outside on the East deck. Keepers with campers and RVs may recognize the system, but it employs an automatic changeover gas regulator. Keepers are responsible for checking the system and looking at the regulator once a day to make sure one of the tanks has not run out. Again, there is a video on the [DRLPS website](https://www.drlps.com/keeper-academy) that will explain the procedure.

WATER SYSTEM:

A lake water system purifies the water by use of filters and an ultraviolet (UV) light treatment system. The blue glow at the top of the UV tank indicates that the system is working properly (located on the wall in tank room in basement, east wall). Although treated, the water is NOT POTABLE and must not be used for drinking, cooking, or ice making. Bottled water is provided by DRLPS for these uses, and signage is installed at all water outlets to remind keepers of this. The lake sourced tap water is fine for all other uses, including showers and hand washing.



TELEPHONE AND MARINE RADIO: Keepers are requested to bring cell phones and to provide their number to the DRLPS officer who is coordinating their service. The number of DRLPS Keeper Chairperson should be called in all emergencies. A marine radio is available but should be off to conserve power when not being used.

PUBLIC RELATIONS: Keepers who receive inquiries from the press or other media about the DRLPS or its programs should refer the inquiries to your DRLPS contact person who will forward the information to DRLPS Public Relations Chairperson. Should people approach in a boat and want to secure to the lighthouse or climb on the lighthouse, they should be advised not to do so. Persons desiring to see the lighthouse should be referred to DRLPS for consideration of a private tour. You may pass down tour brochure in a bucket attached to a rope.

STORM POLICY: The lighthouse has been safe under storm conditions since 1931. However, landing at the lighthouse with a boat can be very difficult during periods of high waves frequently caused by

freighter and pleasure boat wakes. Tours may be cancelled and departures delayed due to weather conditions. The charter boat Captain, hired by DRLPS for tour and keeper transportation, will make decisions regarding go or no go due to weather conditions. In some cases during inclement weather, keepers will need to close the shutters on the lower windows in the event that waves come over the deck.

LIGHTHOUSE SECURITY: All exterior doors and shutters must be locked when the lighthouse is not occupied. Keepers are responsible for not only their personal property but also the DRLPS items and artifacts at the lighthouse.

While it has only happened a few times, keepers have encountered intoxicated individuals climbing on the lighthouse. While a polite request for them to leave may be effective, if at night you may also try turning on the deck lights. If they will not leave call the Keeper Chair who will alert law enforcement. Try to get the registration numbers from their boat and their names.

GENERAL CONDUCT OF KEEPERS: NO smoking is permitted inside the building. Smoking outside is permitted and all waste materials must be picked up and disposed of properly. Nothing is to be thrown overboard.

If you hang anything outside to dry on the railings, secure it well. Do not leave canvas chairs unattended on deck. Past keepers have had towels and a chair blow overboard when an unexpected gust of wind came across the lake.

GUESTS: Guests are not permitted on the lighthouse. Private boats are not to tie to the lighthouse. Damage to boats (due to waves and wakes from passing pleasure craft and freighters) and personal injury have occurred when boats have tied to the light.

AIDS TO NAVIGATION: DeTour Reef Light is an active aid to navigation. Under no circumstances should you tamper with the beacon, Coast Guard electric horn (located on the SE corner of the roof) or RACON transponder. Boats can activate the foghorn by keying 5 times on channel 83. DRL features (from Light List of the Great Lakes published by the U.S. Coast Guard) are:
Item # 12770, De Tour Reef Light, Position: 45 56 54 N, 83 54 12 W
Structure: White square superstructure, square tower on concrete crib
Characteristic, Flashes White every 10s, (R sector from 079.5° to 189.5°.)
Height: 74 feet, White visible 16 miles, Red visible 15 miles
RACON (x/s): D (– • •), HORN activated by marine radio

IMPORTANT TELEPHONE NUMBERS:

Fire/Police (emergency)	911 (If asked location say on DeTour Reef Lighthouse just south of Drummond Island and DeTour Village) Marine Radio, Use channel 16 and call the Coast Guard
DRLPS Keeper Chair	Mary Chamberlin 517-879-9511
DRLPS Technical Support	Brad McGann 406-333-1010 (Power, water, mechanical systems)
DeTour Harbor Marina	906-297-5947, Marine Radio “DeTour Harbor Marina”
Fort Drummond Marine	906-493-5471, Marine Radio “Fort Drummond Marine”

EMERGENCY EQUIPMENT



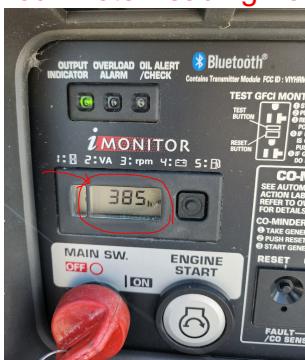
A first aid kit is located in the office. Fire extinguishers are located throughout the Lighthouse. A life ring is stored in the gallery level and should be put on the deck railings and tied with a throwing line when the lighthouse is occupied. Additionally, a few personal flotation devices (PFD's or lifejackets) are located in the gallery level.

An emergency hoist, which can be bolted to the gantry, can be used if someone is injured and cannot climb or descend the vertical pier ladders. The hoist is stored inside at the SW corner of the gallery level and must be attached to the gantry. It will require one person to hold the hoist in place while a second secures it with the attaching hardware. Always use the safety tether/retractor cable in combination with the emergency hoist. Instructions for use of the harness and tether are contained in the three-ring binder in the office.

NIGHT BEFORE DEPARTURE:

To help us with continuity of conditions and systems, each keeper group is required to send an email or text message the last day or the night before the last day with the following information:

- Hour meter reading from the Honda generator



- Number of empty fuel cans to come ashore, and number of full cans remaining on light
- Confirmation that propane regulator does not indicate empty tank (RED window), or that there is an empty propane tank to come ashore
- Money collected from memorabilia sales
- Confirmation that stairs have been swept (including stairs to basement) and all floors on residence level are broom clean
- Any problems, issues, or concerns from your stay at the light
- Any food left behind

The message should be emailed to info@drtps.com or texted to 406-333-1010. Thanks for your cooperation with this important duty.

DEPARTURE:

On the day you move out, please plan to have the Lighthouse clean, be packed, and have all personal items ready for removal prior to your scheduled departure time. Departure time will be Sunday or Friday afternoon around 1pm. Weather conditions may prevent departure at the scheduled time. Wind conditions are usually higher in the late afternoon and calm down late at night and early morning. Keepers should be prepared to spend an extra night at the lighthouse should weather or water conditions prevent departure at the scheduled time. DRLPS will communicate with the keepers by phone should forecast weather conditions indicate either an early or a delayed departure.

Large black and medium white garbage bags are located in the hall closet. Recycle items (cans, glass

and plastic --- no cardboard or paper) should be put in a separate white garbage bag as should cans and bottles with a deposit. A DRLPS member will be able to dispose of this material when you return to the dock.

When you move out you may leave non-perishable food and supplies that you brought to the lighthouse but did not use, including dry foods (coffee, sugar, etc.) - please advise the Keeper Chairperson. Generally, if it won't spoil, it will be welcomed by the next team.

Before leaving DeTour Reef Light

- Close and secure upper and lower latches on steel watch room door

- Close and secure wooden doors in watch room

- Leave hatch at top of spiral stairs open

- Leave all doors to rooms and closets open

- Turn off Marine radio and power source

- Bring back all garbage

- Bring back all recycling materials in separate garbage bags

- Bring back all returnable cans and bottles in regular garbage bags

- Take all empty gasoline containers and propane tanks outside for transport ashore on the boat

- Fill in blue evaluation card, Put card (and any cards from tours) in cash envelope.

- Put checks, cash and memorabilia Sales Record sheet (legal size page with complete record of all sales including size and color of clothing, charge info, etc.) in envelope to give to DRLPS

- Make last entries in log

- Assure that all doors are left open in basement

