

Agenda Item – C4 Report on the patrol vessel 'Nerissa' and daughter RIB 'Nereus' Kent and Essex Inshore Fisheries and Conservation Authority Report for the period January 2024 to May 2024

Priorities of vessel for quarter

- Targeted inspection of static gear.
- Patrol District limits for any large/foreign vessel incursions.
- Patrol areas closed to bottom towed gear.
- Inspect pots and traps for compliance of byelaws.
- Inspection of commercial and recreations fishers.
- Patrol, monitor and inspect cockle fishing areas and activity.
- Logging fishing vessels, gear and activity.
- Sightings and intel logged and reported.
- Input key enforcement information into national fisheries enforcement database (MCSS).
- Attend to cockle survey on inside and outside areas as required.
- Attending to tide hight and sea temperature survey equipment and data.

Maintenance

Nerissa went to the Isle of Wight for her first major refit in December 2023. This was primarily to

- Strip back existing antifoul and apply new antifoul.
- o Remove engines to address an oil leak and service them.
- Check steering and propellors.
- o Overall health check and inspection of both the boat and her systems.

As part of undertaking a range of initial checks on the engines a number of additional issues were found that needed to be addressed.

- The header tanks that also houses pumps and heat transfer systems for cooling were found to have some corrosion, the tank itself needing replacing (this became a large job with a wait time for parts).
- The fixings on the turbos had corrosion and so were replaced whilst attending to the replacement seals and gaskets.

- With the age of the engine and inaccessibility whilst installed in the vessel, it was cost effective and more efficient to replace the starter motors.
- The remote oil feed lines were also replaced whilst the engine was out of Nerissa due to their inaccessibility within the engine bay itself.

The works on Nerissa continued at the boatyard whilst the engines were away.

- The hull was found to have some damage to the base of the fiberglass skegs
 where the vessel had touched the ground at times or been placed on the hard
 for maintenance works (A "skeg" is an aftward extension of the keel intended
 to keep the boat moving straight and to protect the propeller and rudder
 from underwater obstructions). This was dried and reinforced before the new
 antifoul was applied.
- The transom anodes were replaced and earthed to vessels rudders and engines.
- The main seacocks were also found to have the start of some corrosion and replaced whilst out of the water along with the raw water inlet.
- All of the deck hatches were removed, surfaces cleaned and reinstalled with a refinished. The anti-slip finish was reapplied where it had worn in areas, antislip edge caps applied to steps, additional scuppers added midship to free excess water and debris from gear inspections and survey works as well as a small step reducing water from the deck being walked into the wheelhouse.
- The hydraulic system for winches and haulers was checked over replacing the main gantry rams and their hoses, the hydraulic tank refilled and tested.
- The steering system also checked and topped up.
- A multilayer silicon antifoul system was applied (timing of the application of the antifoul was difficult to coordinate as the product was not available until January but has a short shelf life before application).

Refitting the engines and passage back to Ramsgate

Unfortunately, once the engines were reinstalled there were some major fuel leaks on first start up. Work then needed to be undertaken to address these new leaks before a sea trial could be undertaken. The yard assisted with some minor repairs and testing before Nerissa started to make the passage back to Ramsgate, on March 20th.

The return passage from the Isle of Wight was eventful as alarms for coolant pressure and the turbo air pressure were both sounding intermittently. After investigation eventually the faults were cleared, and passage continued. Halfway through the passage the same coolant fault limited the revs of the starboard engine slowing our progress by a few knots but did not cause any temperature issues.

Once back in Ramsgate after her refit Nerissa needed to get straight into work. Whilst on patrol and survey there have been a few engine issues, control panel alarm and notifications, along with pre and post patrol checks of engine spaces which have highlighted these. There are some small coolant leaks on both engines that require work, a fuel leak still, the source of which needed chasing on one engine and a weep on an oil fitting on the other.

The fuel leak was attended to with two visits from an engineer, who worked through the system and refitted several seal washers and tightened coupling fittings. The oil fittings continue to be monitored and engineers are revisiting to attend to coolant leaks with some parts once they are available and investigate a coolant pressure imbalance that has been noted.

Since this additional work the vessel has been working well and, going into survey works, new ropes have been fitted to winches and the day grab checked over with maintenance works and service items checked.

Fisheries Enforcement

Forty log entries for sightings of vessels were made, some seen on a few occasions; twenty-one were registered fishing vessel, thirteen were charter vessels that were actively fishing and six privately owned recreational angling vessels. Sixty-eight individual gear surface markers were recorded, most of which were clearly marked with the fishers PLN. With new whelk permits having been issued and lobsters starting to move we have begun to start to haul gear and check for compliance with the relevant Byelaws.

During survey works we have continued to monitor fishing activity and effort within the areas we have surveyed. However, with Nerissa fitted to allow surveys to take place, the RIB Nereus is left back in port and the deck installed over the tender well. Boardings are therefore not carried out but when possible, we will approach a vessel to speak with the fishers.

The patrol logs have been uploaded into the required databases and relevant information, in a report format, has been forwarded to the relevant agencies and enforcement bodies.

Conservation/Survey work

With Nerissa back in action she has gone straight back into cockle survey works for the inside and outside fishery, this has involved revisiting previous sites as well as working with the science and enforcement teams to set up sampling grids on some new sites to develop data sets. We have also been working on a project on behalf of Thanet District Council to collect cockles biweekly for shellfish classification testing.

On completion of cockle sampling Nerissa will be going on to attend to the whelk survey pots every few weeks collecting the data from loggers and assisting with the running mark and recapture studies as required. A group of ten to thirty seals have been sighted hauled out plus a few individual sightings in deeper water. Four porpoises were sighted thought to be part of a larger pod in the area.

Other Information

We look forward to inducting new staff members to the vessel and getting them up to speed with day-to-day operations, maintenance, survey and enforcement processes.

Statistics:

Tamesis was returned to Essex at the end of January after making a few patrols on the Kent side whilst here. Nerissa has covered 700 miles since her return at the end of March, we have taken 5,500 litres of fuel in Ramsgate plus 2,000 on the Isle of White before her passage back. HVO fuel has not been available in Ramsgate this year, but we intend to use this as soon as it is made available.

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