



SEAL
CONSERVATION
SOCIETY



**What evidence is there for
rehab pup survival and normal
behaviour after release?**

Morgan et al (1993)

This study VHF-tracked 18 rehab pups in 1991 & 1992, of which 15 were probably Neonatal 'orphans' and the other 3 were 13–15 kg. The seals were released at ~3-4 months of age and 21-34 kg. Only 2/16 pups tested before release with live fish actually caught and ate fish.

Known survival to 100 days was 44% and 28% after 150 days. One pup was found dead with lungworm. One seal was not located after the first week, and the fate of four was unknown.

In both years a few rehab seals appeared to become resident in the release area, while others were more wide-ranging.

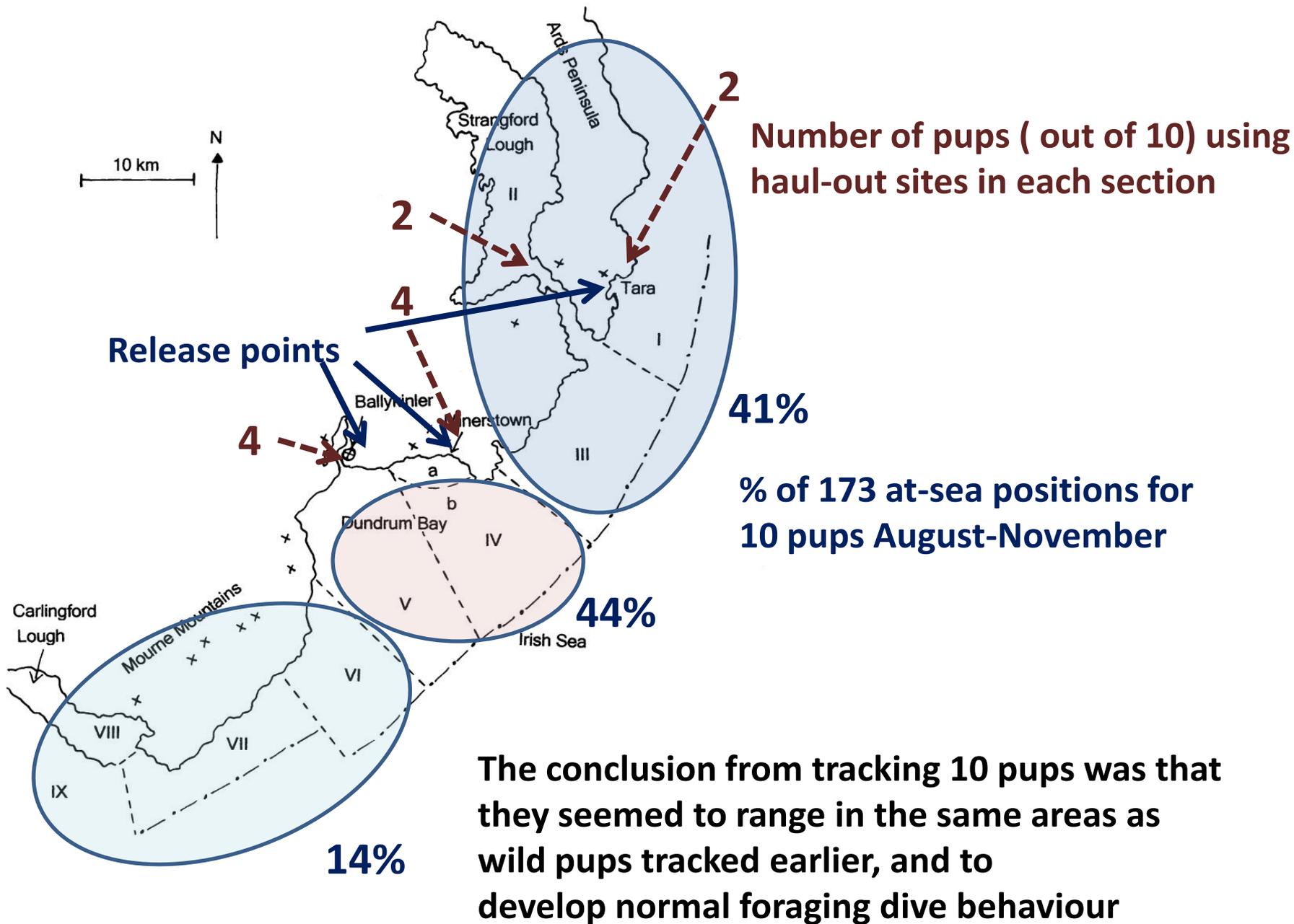
Wilson et al. 1999; unpubl data . Tracking 10 rehab pups from TSR, including 9 Neonate 'orphans' and 1 post-weaning pup. Pups in rehab for 3–6 weeks, released at 18-22kg.



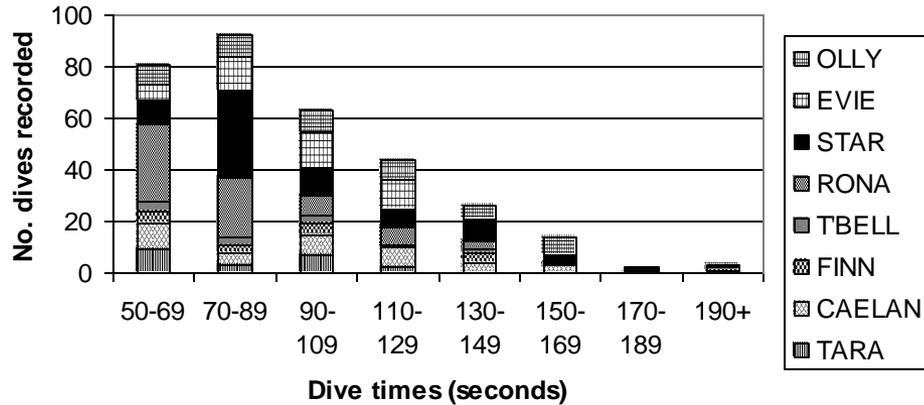
Benefits of releasing at a haul-out site



Release – Finn and Tinkerbell (2001)

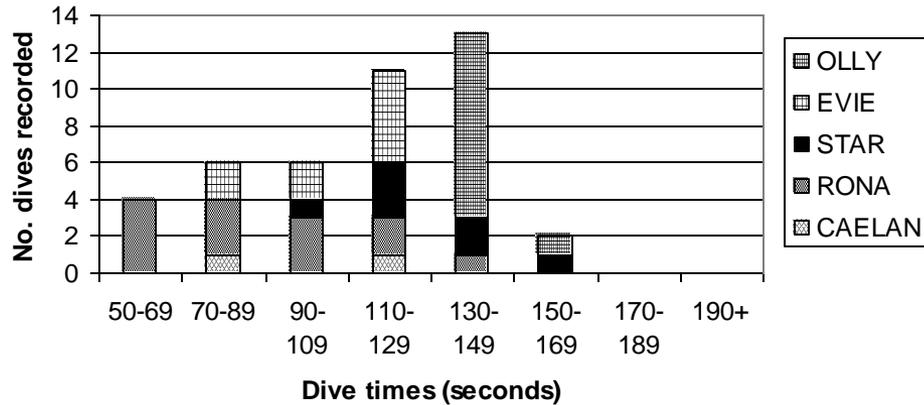


A. PERIOD 2 Aug 11 – Sep 01



Increase in dive times during 1st 6 weeks after release

B. PERIOD 3 Sep 02 – 23



Wilson et al. (1999)

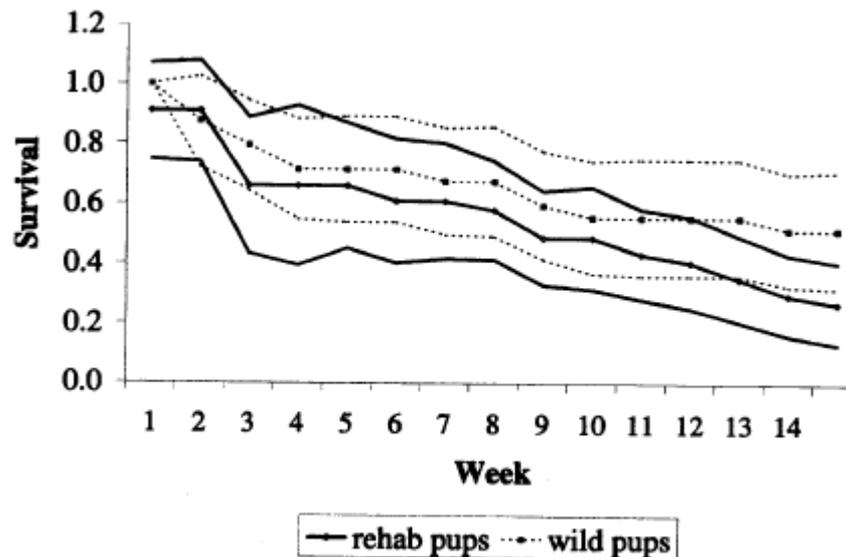
Four rehab pups from aquarium 'Exploris' in N. Ireland were VHF-tracked in 1995 & 1998. 3 pups were considered to be neonate 'orphans' on recovery and 1 post-weaning pup. Pups were released after ~3 months in rehab.

Of the 3 rehab 'orphans', one ('Snap') died less than a week after release, and one ('Laa-laa') left the study area the day after release and was not located again. The 3rd pup ('Pop') stayed in the study area for 3 days and then migrated 20km to A commercial fishing harbour, where she remained For 5 weeks, and was seen catching and eating live flounder and eels . She then migrated 30km to Dublin Bay . The 4th presumed post-weaning pup, 'Po' stayed beside a busy harbour near her release site for four days. She then left the study Area, but was relocated at a haul-out site within the study area 2 months later.

Dive duration for 'Snap' averaged slightly >30s in waters of 20m depth. DD for 'Pop' Averaged slightly >80s in the harbour, and 125-136s in Dublin Bay. In waters up to 28m depth.

Lander et al. (2002) used VHF tracking to compare 29 rehab pups with 24 wild pups in California in 1995, 1996 & 1998. The recovery ages/weights of the rehab pups are not given.

Dive duration did not differ in the two groups. Rehab pups spent more time in the water than wild pups. Survival curves were similar in 1995, but rehab pups had lower survival in 1996. Rehab pups were more likely to disperse out of the local area than wild pups (11 rehab vs. 5 wild pups).



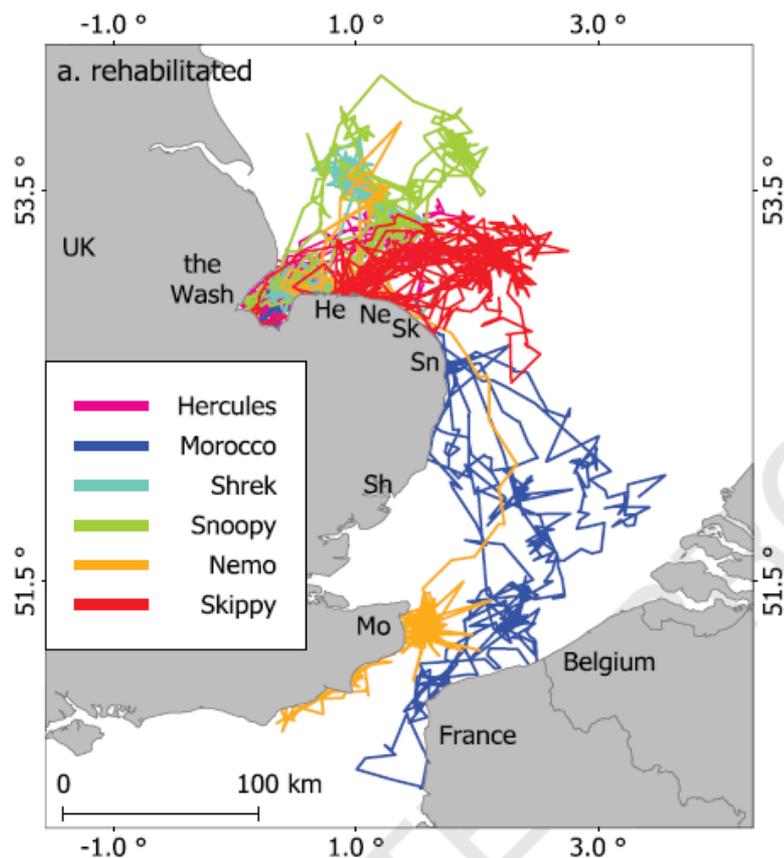
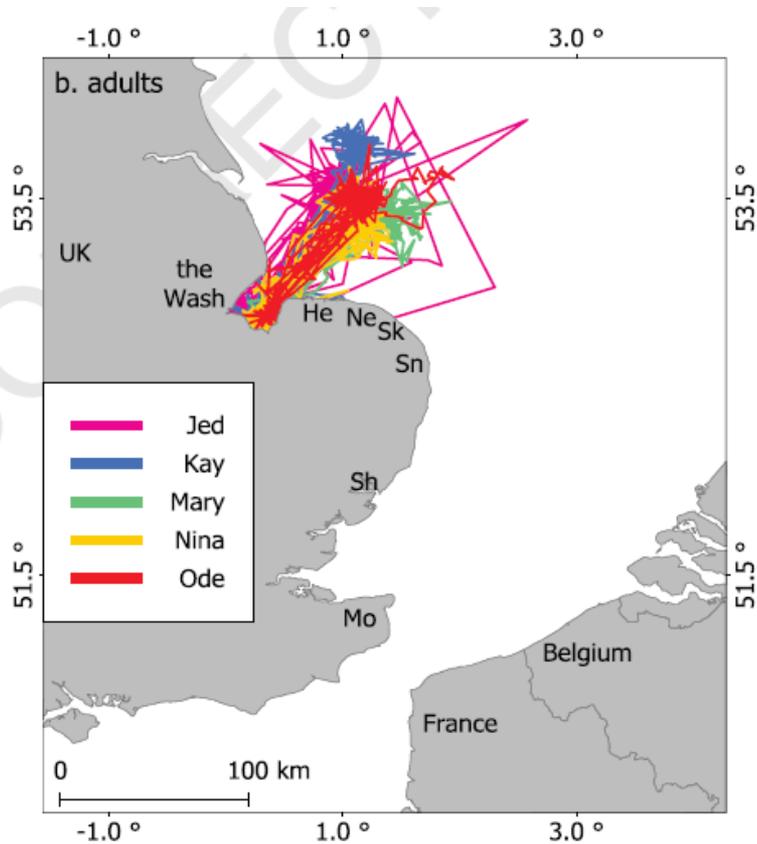
Rehab/wild difference not statistically significant during study period

Morrison et al (2011)

This study tracked six rehab pups with SDLRs from the RSPCA rehab centre in Norfolk. All pups were recovered between Sep-Oct 2003 (i.e. All were weaned pups Aged 2-3 months) with ailments ranging from wounds and abscesses to respiratory problems. All were released aged 7-8 months in Feb. Five wild adult harbor seals were caught, tagged and released at the same time for comparison.

Results: There was no significant difference between the rehab pups and adults in dive duration or % time spent diving.

Conclusion: Rehabilitation was successful for these six pups recovered at 2-3 months old.



All five adults remained and foraged in the East Anglia area of the North Sea, within a 50km radius. Four of the pups also did so, although two migrated, one to SE England (that pup 'Nemo' was recovered there) and the other to France.

Gaydos, 2012.

A SDRL study of 10 rehab pups and 10 wild-pups in Washington state found That rehab pups swam twice as far daily and moved twice the distance from the release site as did wild pups from their haul-out site . Rehab pups transmitted For only half as long as wild pups, suggesting survival was poorer.

There are no data on the background of the rehab pups, though it is believed that most or all were neonatal 'orphans' kept isolated or a few weeks (Gaydos, pers. comm.), and in rehab for a total of 80 days and released at 25.4 kg average (Briese et al, 2012).

OVERALL CONCLUSION

Results from tracking are mixed, though some positive results.

Suggest studies to test if:

- Survival may be greater for pups recovered as weaned pups. They will, before rehab, have been socialised with mother and other pups/seals, will have foraging experience and will have some geographical and topographical orientation.
- The likelihood of normal behaviour may be greater for pups recovered as neonatal 'orphans' if the rehab environment mimics the essential features of the natural environment as closely as possible (pups kept socially with access to water), and rehab time is minimised to a few weeks, such that pups may be released as close as possible to the natural season, age and weight of weaning in the wild.

References

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