DARENT VALLEY TROUT FISHERS

Flyfishing Club

DVTF Environmental Stewardship Action Plan

To improve Water quality and quantity

- ✓ We regard the monitoring of insect and fish populations as essential to understanding the health of the river and we will continue to attach a high priority to these activities.
- ✓ The Club will consider joining the Water Quality Monitoring programme led by the Angling Trust, which involves regular sampling and analysis of water from the river, and has initiated discussions with the Trust on the matter.
- ✓ WildFish (formerly Salmon and Trout Conservation) works actively on behalf of anglers and ecologists to reduce pollution and excessive abstraction. In particular, they have pioneered the Riverfly Partnership which monitors insect life across many of the UK's rivers under greatest threat. The Club is not currently a member but will subscribe to membership and contribute to their fund-raising activities.
- ✓ We will respond to Government consultations on matters impacting on pollution and abstraction of water courses and we will also encourage our members to respond as individuals. We have had limited engagement with local politicians in the past but will endeavour to engage more regularly going forward, particularly when their support is likely to help to achieve improvement e.g. on legislating to reduce the discharge of untreated sewage into rivers and coastal waters.

To improve the river environment

- ✓ Whilst all stretches of the river need careful management, the wooded sections of the Furlongs Farm beat and in the Hopgarden beat at Castle Farm are of particular concern. In both cases, overhanging trees continue to shade the river in such a way as to severely inhibit plant life growing the river. This in turn inhibits growth of aquatic insects and fish. Priority will be given to improving these areas to shed more light on the river. Where appropriate, ranunculus will be replanted to accelerate the return of the water to a state where it can support insect and fish populations.

Eradicating invasive species (e.g. Himalayan Balsam)

- ✓ The joint initiative in 2021 with NWKCP to tackle Himalayan Balsam was an experiment and was deemed by all to have been worthwhile. We will repeat this regularly going forward.
- ✓ There is growing concern that signal crayfish (*Pacifastacus leniusculus*) may be populating the Darent and they have been observed upstream of the Club's water at Shoreham. As well as displacing the native white-clawed crayfish (*Austropotamobius pallipes*), signal crayfish can have a devastating effect on the ecology of the river ecology with adverse effects on the insect and fish populations. In the first instance, the Club will ask members to look out for them and report any they see. Whilst the actions available to us to prevent their spread are very limited, we will if necessary work with other stakeholder groups to find a way forward.
- ✓ We will address other invasive species as the need arises through targeted initiatives.

Undertaking project work to improve river conditions such as to improve the environment for native fish species e.g. by increasing in-channel water velocities and reducing silt deposition through the use of woody debris, repairing damage from dredging by introduction of gravel etc.

- ✓ We will continue to identify those stretches of the river that would benefit from intervention beyond the scope of routine maintenance, particularly those stretches of the river that have suffered habitat degradation, including dredging. Specifically, sections of the Preston Farm beat and at Castle Farm between Cobbetts pool and the wooded section of the Hopgarden beat should command a priority. In each case we will engage with our waterlords and seek guidance from the Wild Trout Trust on how best to improve the habitat. However, we will only invest the Club's resources in such initiatives when we have a lease that ensures our continued access to the water for a sufficient period to justify commitment of the Club's resources.

Maintaining the river in such a way as to create an eco-system that encourages the growth of wild fish populations e.g. controlling weed growth in order to maintain river flows and discourage silt deposition, ensuring that gravel beds are clean and sufficiently loose for breeding fish to create redds etc.

- ✓ Going forward, we will adopt a more structured approach to the identification, documentation and maintenance of those areas most suited to redds. In doing so we will prioritise those areas where wild trout populations have been observed in recent years. These areas will be subject to a specific maintenance regime i.e. weed cutting to minimise silt deposition and raking in the autumn to enable wild fish to create redds. We will also minimise stocking in these designated areas to avoid competition between wild and stocked fish for food, refuge etc.
- ✓ We have previously engaged with the Environment Agency to explore ways to accelerate the re-establishment of a larger self-sustaining wild trout population without damaging the natural gene pool. Although we recognise that improving the environment for wild fish will have the greatest contribution on the wild trout population, we will initiate further discussions with EA on the feasibility of kick-starting through stocking of small fertile fish from an appropriate gene pool.
- ✓ We will evolve our stocking policy over time to reduce stocking in areas where the wild trout population is flourishing with the ultimate aim of ceasing stocking in some or all stretches of the river leased by the Club.

To return the Darent to a state in which it can support a migratory fish population

- ✓ The removal of barriers along the length of the Darent is being championed by the Darent & Cray Catchment Partnership. A feasibility study is required for each barrier to establish the potential upstream and downstream impact of its removal and hence whether the most appropriate approach is to remove the barrier or to construct a by-pass for migratory fish. In most cases, significant expenditure is involved and therefore external funding will be needed. The Club will therefore seek to progress this in partnership with the Catchment partnership, DRIPS and the Environment Agency with the expectation that the Catchment partnership will take the lead.

Summary of priority actions

1. We will continue to assess the fish and insect populations in those stretches of the Darent that we lease as a measure of the health of the river. Specifically, we will:
    a. undertake regular assessments of the insect population through kick sampling analysis at specific monitoring sites
    b. Conduct annual electrofishing studies to monitor wild fish populations and supplement information derived from members' catch returns
    c. We will consider joining the Angling Trust's river water quality monitoring programme.
2. We will subscribe to membership of WildFish (formerly Salmon and Trout Conservation) to support their campaigning and benefit from their expertise.
3. We will target river maintenance in order to:
    a. Reduce and if possible eradicate Himalayan Balsam from the riverside
    b. Remove bur-reed and cut other river weed sympathetically, focussing on those areas where weed is inhibiting flow and encouraging silt deposition
    c. Maintain bank-side vegetation and overhanging trees in a way that benefits the ecosystem and encourages river plant life, insect and fish populations
    d. Identify, document and maintain those stretches of gravel most suited to the creation of redds.
4. We will continue to identify and prioritise projects which will address current river features that are not consistent with our long-term vision. We will seek advice from external sources of expertise such as the Wild Trout Trust in order to determine how best to achieve this. Areas under current consideration include:
    a. Improving flows between Cobbett's pool and the wooded section of the Hopgarden beat

b. Improving weed growth through the Hopgarden beat and in sections of the Furlongs Farm beat by opening up access for light and replanting ranunculus.

c. Improving flows in deeper narrower sections of the river through Preston Farm

5. We will evolve our stocking policy over time to support our longer term aims. Specifically, we will designate stretches of the river suited to the creation of redds and those where wild trout populations have been observed in recent years as "non-stocked areas" to minimise competition between stocked and wild fish. We will progressively reduce stocking levels over time to mirror increases in the self-sustaining wild trout population so that ultimately, some or all of the stretches to which the Club has access can operate as true wild trout fisheries.

6. We will have further discussions with the Environment Agency regarding the feasibility of accelerating the enlargement of the wild trout population through reintroduction of fertile brown trout in a way that is not damaging to the gene pool.

7. We will work with partners to remove or bypass the barrier to migratory fish that currently exists at Eynsford.

8. We will engage with Park Farm Flyfishers and Kingfisher Angling & Preservation Society to seek opportunities to work with them on a common environmental approach where this is likely to be mutually beneficial

9. We will explore whether there are further opportunities to work with local educational establishments to leverage their skills and resources in order to achieve our development objectives.

The Club has limited resources and will therefore further prioritise as necessary based on the cost/benefit i.e. the resourcing requirement relative to the environmental benefit.