Juvenile Salmonid Summary
Ogwen Catchment

This report summarises the findings of the 2018 juvenile salmonid monitoring on the Ogwen catchment. A more detailed assessment of the stocks will be available in 2019 when the Know Your Rivers reports are published.

Juvenile Salmonid Monitoring Programme

In 2018 the temporal (annual) programme consists of 1 site on the Ogwen. The temporal data is used to look at trends in juvenile salmon and trout densities giving an indication of spawning across the whole catchment.

Key Points

Juvenile salmon densities across Wales in 2018 have been mixed. The Ogwen has had good results in 2018. Salmon fry densities were around double what we have seen since 2015. This reflects the improved rod catch in 2017. The densities in 2018 are in-line with the historic average. Salmon parr densities were good compared to the historic data, and up with the highest densities on record.

Trout fry densities remained consistent at the site in 2018 and are in-line with the five-year average. This does not follow the trend of improved sea trout rod catch on the Ogwen catchment. No trout parr were caught at the site, however densities are always low due to the limited habitat.

Salmon and Trout Classifications

The following maps show the results of the routine juvenile salmonid population surveys from 2018 on the Ogwen.

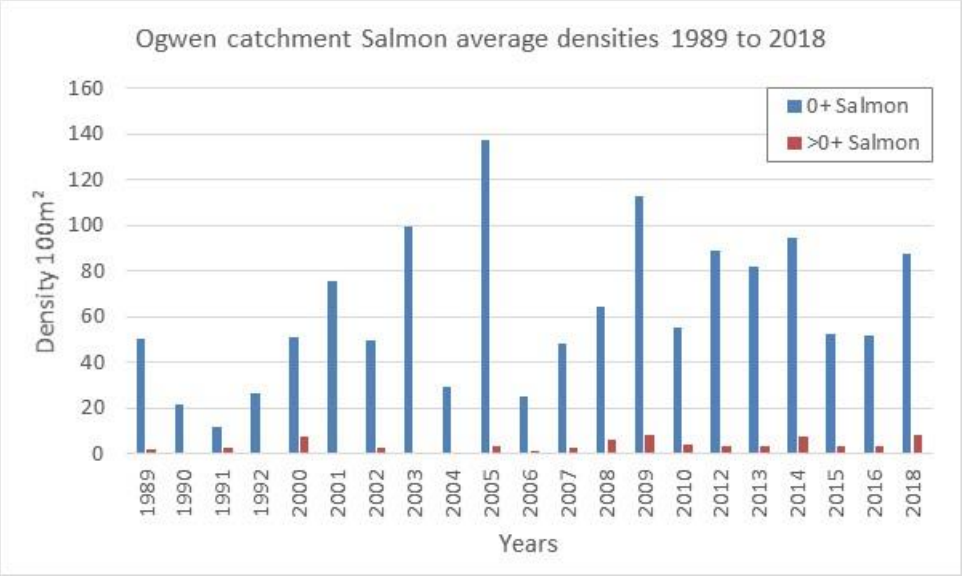
The symbols display the National Fish Classification Scheme (NFCS) grades which have been developed to evaluate and compare the results of fish population surveys in a consistent manner. The NFCS ranks survey data by comparing fish abundance at the survey sites with sites across Wales and England where juvenile salmonids are present. Sites are classified into categories A to F, depending on densities of juvenile salmonids at the site. The following table shows the values and classification of NFCS.

Grade	Descriptor	Interpretation
A	Excellent	In the top 20% for a fishery of this type
B	Good	In the top 40% for a fishery of this type
C	Fair	In the middle 20% for a fishery of this type
D	Fair	In the bottom 40% for a fishery of this type
E	Poor	In the bottom 20% for a fishery of this type
F	Fishless	No fish of this type present

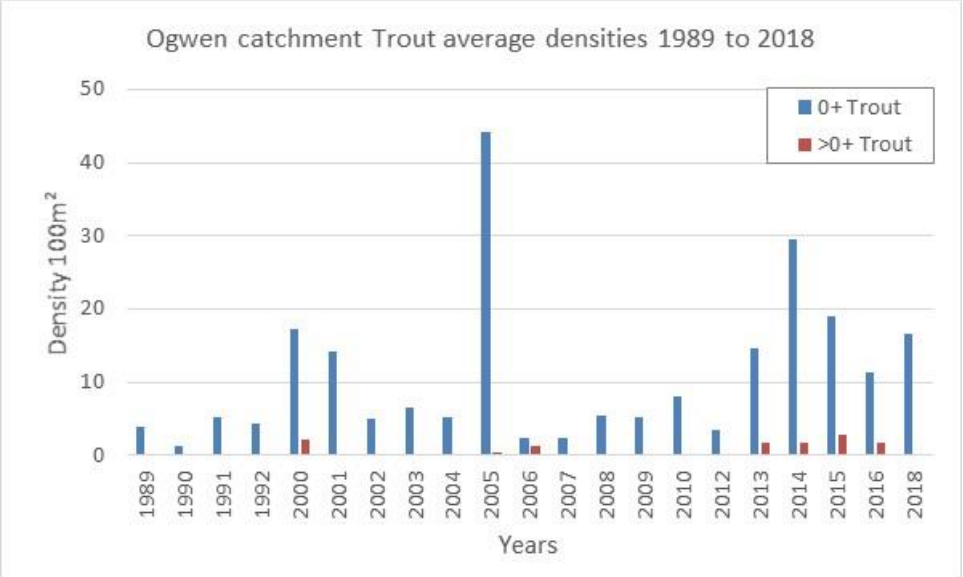
Catchment Population Trends

The graphs below show a simple comparison of average salmon and trout densities on the Ogwen catchment since surveying began in 1989. NB – the data shown here is from Quantitative and Semi Quantitative surveys, the site was not done every year, and no surveys were done from 1993 to 1999, 2011 and 2017. Historic catch efficiency data allows the semi quantitative figures to be comparable with quantitative data.

Salmon fry densities have varied since 1989. The density in 2018 is good compared to the historic data and is positive compared to many catchments in Wales. Salmon parr density has improved compared to historic data but is still relatively low.



Brown trout fry densities on the Ogwen have fluctuated and have never been high due to the habitat. The brown trout fry densities in 2018 are in-line with densities recorded since 2013. No trout parr were caught in 2018, however densities are always minimal. The habitat is mainly salmon biased.



The following table shows a simple comparison of the catchment average density of juvenile salmon and trout from 2018, and compares this to 2016 (poor spawning year across the UK) and the 5-year average (2011-15). The site was not fished in 2017 so no comparison is available.

	0+ Salmon	>0+ Salmon	0+ Trout	>0+ Trout
2018 average density	87.5	8.4	16.5	0.0
2016 average density	52.0	3.3	11.4	1.6
Percentage difference to 2016	**68%**	**159%**	**44%**	**-100%**
5-yr average (2011-15)	79.5	4.3	16.7	1.5
Percentage difference to 5-yr average	**10%**	**95%**	**-1%**	**-100%**

The improvement in salmon fry & parr against the five-year average links directly to rod catch. Rod catch has improved since 2015 from 34 salmon per season to 74 salmon in 2017.

The trout fry densities in 2018 do not reflect the improvement in sea trout rod catch on the catchment. Rod catch has improved since 2015 from 143 sea trout per season to 377 sea trout in 2017. The electro-fishing site is predominantly salmon habitat, with limited spawning gravels for sea trout.