Supplement. Additional figures

Fig. S1. Labeled $^{15}$N-N$_2$ ($^{15}$N in $^{15}$N$_2$ and $^{30}$N$_2$) concentrations from Expt F1. *Ulva lactuca* was embedded between ripple trough and peak on the 1st and 3rd ripples. Samples drawn from ports (a) 2.8 cm, (b) 5.8 cm and (c) 8.8 cm below the sediment ripple troughs plotted against distance along the flume. Overlaid on (a) is the horizontal oxygen transect at this depth (thin black line). Oxygen transect was derived from planar optode images. (d) shows the sediment–water interface (SWI, wavy black line) and approximate positions of *U. lactuca* (straight black bars).
Fig. S2. Labeled $^{15}$N-$\text{N}_2$ ($^{15}$N in $^{29}$N$_2$ and $^{30}$N$_2$) concentrations from Expt F2. *Ulva lactuca* was embedded at the 2nd and 4th ripple troughs. Samples drawn from ports (a) 2.8 cm, (b) 5.8 cm and (c) 8.8 cm below the sediment ripple troughs plotted against distance along the flume. No oxygen transect is overlaid since there was insufficient oxygen penetration during this experiment. (d) shows the sediment–water interface (SWI, wavy black line) and approximate position of *U. lactuca* (straight black bars)