Supplementary table S2. Selected genes with differential mRNA expression in perch in the reference site Kvädöfjärden collected in 2014 vs. 2010.

Accession no.	Log_2FC[1]	*p*-Value	FDR[2]	Annotation UniProt
Sterol- och steroidmetabolism				
104_DN21829	4,99	4,27E-06	2,50E-04	3-keto-steroid reductase
104_DN22531	2,56	3,93E-04	9,43E-03	Delta(24)-sterol reductase
126_DN20194	1,23	2,00E-03	3,23E-02	NADH-cytochrome b5 reductase 2
126_DN23022	-1,10	1,16E-03	2,15E-02	Cholesterol 24-hydroxylase
112_DN19827	-1,28	1,33E-04	4,01E-03	17-beta-hydroxysteroid dehydrogenase 14
127_DN24584	-1,41	1,86E-04	5,25E-03	Cholesterol 7-alpha-monooxygenase
Oogenesis				
124_DN28469	-3,13	1,53E-04	4,48E-03	Zona pellucida sperm-binding protein 1
107_DN21963	-3,25	7,09E-07	5,62E-05	Vitellogenin-2
110_DN22635	-3,30	2,55E-05	1,07E-03	Zona pellucida sperm-binding protein 4
124_DN36989	-4,01	5,35E-05	1,94E-03	Vitellogenin
Detoxification, phase I and II				
126_DN20194	1,23	2,00E-03	3,23E-02	NADH-cytochrome b5 reductase 2
128_DN21652	1,19	1,23E-04	3,76E-03	Aflatoxin B1 aldehyde reductase member 2
127_DN23472	-0,91	1,72E-03	2,88E-02	Glutathione S-transferase theta-1
112_DN15396	-1,04	3,14E-03	4,47E-02	Glutathione S-transferase 3
122_DN23970	-1,42	8,26E-04	1,66E-02	Cytochrome P450 2J2
112_DN23062	-1,55	4,37E-04	1,02E-02	Cytochrome P450 2F1
110_DN16992	-1,78	2,59E-04	6,82E-03	Glutathione S-transferase A
110_DN22847	-1,88	1,96E-04	5,47E-03	UDP-glucuronosyltransferase 1-2
110_DN23013	-2,13	1,89E-05	8,42E-04	Cytochrome P450 2K1
110_DN10085	-2,78	2,96E-08	3,91E-06	Aldehyde dehydrogenase family 3 member B1
Membrane pumps				
104_DN20778	6,71	5,72E-12	2,24E-09	Multidrug and toxin extrusion protein 1]
128_DN16572	2,86	7,55E-05	2,55E-03	Multidrug resistance-associated protein 5]
116_DN22500	2,53	7,29E-10	1,58E-07	ATP-binding cassette sub-family A member 1
128_DN27344	2,32	1,04E-03	1,98E-02	ATP-binding cassette sub-family A member 1
127_DN42430	-2,23	1,98E-03	3,20E-02	ATP-binding cassette sub-family A member 1
Oxidativ stress				
116_DN13485	4,98	1,23E-13	7,48E-11	Peroxiredoxin-6
104_DN23042	2,41	1,95E-07	1,93E-05	Glucose-6-phosphate 1-dehydrogenase
128_DN21814	2,34	1,37E-06	9,75E-05	Peroxisome proliferator-activated receptor alpha
128_DN7034_	1,25	2,44E-04	6,52E-03	Thioredoxin-like protein 1
107_DN22433	0,94	2,65E-03	3,97E-02	Peroxiredoxin-1
127_DN13870	0,99	1,15E-03	2,15E-02	Peroxisomal membrane protein PMP34
110_DN18917	-1,14	6,07E-04	1,31E-02	Catalase
122_DN24156	-1,64	4,85E-04	1,11E-02	Peroxisomal bifunctional enzyme
127_DN25180	-1,70	2,68E-05	1,12E-03	Peroxisomal bifunctional enzyme
Iron metabolism				
128_DN21808	2,96	1,80E-10	4,70E-08	Hemopexin
126_DN22621	2,57	5,00E-08	6,01E-06	Mitoferrin-2
128_DN20821	2,54	1,09E-09	2,25E-07	Transferrin receptor protein 2
126_DN22938	2,43	1,41E-08	2,03E-06	Serotransferrin

126_DN23062	2,32	1,46E-09	2,85E-07	Metalloreductase STEAP4
126_DN22749	4,28	5,02E-11	1,53E-08	Haptoglobin-related protein
110_DN18564	9,06	2,47E-27	2,03E-23	Hepcidin
107_DN21340	-3,02	1,30E-04	3,92E-03	Cytochrome b reductase 1
110_DN22493	-3,03	2,05E-10	5,32E-08	Ferritin middle subunit
Catecholmetabolism				
116_DN22980	3,36	2,28E-14	1,71E-11	Catechol O-methyltransferase domain-containing protein 1
116_DN22980	3,33	3,60E-14	2,51E-11	Catechol O-methyltransferase domain-containing protein 1
Immune defence				
104_DN23031	5,85	1,30E-22	5,69E-19	Complement C1q-like protein 2
127_DN25993	-2,54	2,46E-07	2,35E-05	Complement C1q-like protein
104_DN23210	1,83	2,53E-07	2,39E-05	Complement C3 (Fragment)
112_DN22952	-4,33	1,67E-09	3,17E-07	Complement C3 (Fragment)
110_DN22404	-1,66	5,74E-05	2,06E-03	Complement C4-A
112_DN22703	1,32	9,94E-05	3,17E-03	Complement C5
126_DN22748	2,75	4,64E-15	4,68E-12	Complement component C7
104_DN22176	1,33	9,34E-05	3,02E-03	Complement component C8 beta chain
128_DN21912	2,35	2,66E-11	8,76E-09	Complement component C9
116_DN22969	1,13	2,65E-03	3,97E-02	Complement factor H-related protein 1
107_DN21973	-1,41	9,92E-04	1,91E-02	Complement factor H-related protein 1
128_DN21928	1,40	2,77E-03	4,09E-02	Complement factor I
127_DN33945	2,14	1,76E-06	1,22E-04	C-reactive protein
116_DN20669	2,01	3,53E-08	4,50E-06	C-X-C chemokine receptor type 3
122_DN8216	1,52	1,16E-06	8,38E-05	Interferon regulatory factor 7
128_DN22157	3,10	3,05E-15	3,34E-12	Interferon-induced double-stranded RNA-activated protein kinase
116_DN21077	5,79	1,07E-14	9,11E-12	Interleukin-1 receptor type 2
128_DN21825	4,96	1,20E-07	1,28E-05	Interleukin-8
104_DN22954	-1,42	2,52E-05	1,06E-03	Leukocyte surface antigen CD53
122_DN25031	1,39	3,61E-05	1,44E-03	Lysozyme C
104_DN23160	1,68	3,36E-04	8,34E-03	Major histocompatibility complex class I-related gene protein
116_DN21751	3,14	4,24E-12	1,74E-09	Nuclear factor NF-kappa-B p100 subunit
126_DN19402	2,15	7,12E-07	5,62E-05	Nuclear factor of activated T-cells cytoplasmic 3
104_DN23059	5,55	3,88E-25	2,12E-21	Serum amyloid A-2 protein
128_DN22074	2,26	1,97E-07	1,94E-05	Serum amyloid P-component
128_DN21577	4,79	1,46E-12	6,71E-10	Toll-like receptor 5
Lectins				
126_DN22977	2,45	1,26E-07	1,33E-05	Collectin-12
124_DN37871	-2,83	1,19E-05	5,83E-04	C-type lectin BfL-1
126_DN22477	3,97	6,59E-13	3,27E-10	C-type lectin domain family 4 member D
127_DN24636	-6,18	3,19E-11	1,02E-08	Fucolectin-5
127_DN25808	-3,22	2,32E-05	9,96E-04	Galactose-specific lectin nattectin
124_DN10265	-3,45	1,85E-03	3,04E-02	Galectin-1
112_DN6893	3,27	7,70E-12	2,92E-09	Intelectin
110_DN22693	-1,99	2,15E-07	2,09E-05	Lactose-binding lectin l-2
128_DN710	3,03	1,49E-07	1,53E-05	Ladderlectin
124_DN28375	-3,82	7,14E-07	5,62E-05	Ladderlectin
116_DN20467	2,05	1,92E-04	5,39E-03	Mannose-specific lectin

[1]The fold change (FC) is presented as $\log_2$FC. Positive values represent a higher mRNA expression in 2014 compared to 2010 and negative values represent a higher mRNA expression 2010 compared to 2014 showing the unique annotated gene with the highest fold change from the full gene list.

[2]The false discovery rate (FDR) represents the portion of false positives.