

**Results of Radioactive Material Monitoring of Aquatic Organisms (Location C along the Uda River)**

<Location C along the Uda River: Samples collected>

Locations	General items		Radioactive materials			
	Water	Sediment	Water (Cs)	Water (Sr)	Sediment (Cs)	Sediment (Sr)
C-6	○	○	○	○	○	○

<Location C along the Uda River: Site measurement item>

Locations	Latitude and longitude of the location		Survey date and time			Water	Sediment				Other	
	Latitude	Longitude	Date	Time (water)	Time (sediment)	Water temperature (degrees C)	Sediment temperature (degrees C)	Property	Color	Contaminants	Water depth (m)	Transparency (cm)
C-6	37.7764°	140.8877°	2020/7/2	12:43	13:02	22.2	22.2	Sand	10YR5/4	None	0.57	>50

<Location C along the Uda River: General survey items/Analysis of radioactive materials Water>

Locations	Latitude and longitude of the location		Survey date and time		pH	BOD (mg/L)	COD (mg/L)	DO (mg/L)	Electric conductivity (mS/m)	Salinity	TOC (mg/L)	SS (mg/L)	Turbidity (FNU)	Cs-134 (Bq/L)	Cs-137 (Bq/L)	Sr-90 (Bq/L)
	Latitude	Longitude	Date	Time (water)												
C-6	37.7764°	140.8877°	2020/7/2	12:43	7.6	<0.5	3.0	9.2	11.3	0.06	1.3	5	2.3	N.D.(0.0013)	0.0061	0.00086

Note) N.D. means to be below the detection limit and figures in parentheses show the detection limit.

<Location C along the Uda River: General survey items/Analysis of radioactive materials Sediment>

Locations	Latitude and longitude of the location		Survey date and time		pH	Redox potential E <sub>NHE</sub> (mV)	Water content (%)	IL (%)	TOC (mg/g-dry)	Soil particle density (g/cm <sup>3</sup> )	Grain size distribution								Cs-134 (Bq/kg-dry)	Cs-137 (Bq/kg-dry)	Sr-90 (Bq/kg-dry)
	Latitude	Longitude	Date	Time (sediment)							Gravel (2-75mm) (%)	Coarse sand (0.85-2mm) (%)	Medium sand (0.25-0.85mm) (%)	Fine sand (0.075-0.25mm) (%)	Silt (0.005-0.075mm) (%)	Clay (Less than 0.005mm) (%)	Median grain diameter (mm)	Maximum grain diameter (mm)			

Note) N.D. means to be below the detection limit and figures in parentheses show the detection limit.

<Location C along the Uda River: Analysis items Aquatic organisms>

Locations	Sampling point	Latitude and longitude of the location		Sampling date	Division	Class	Order	Family	Scientific name	English name	Population	Sample weight (kg-wet)	Note			Radioactive cesium (Bq/kg-wet)			Sr-90 (Bq/kg-wet)			
		Latitude	Longitude										Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137				
C-6	The main stream of the Uda River	37.7764°	140.8877°	2020/7/2	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.0051	-	-	-	14	N.D.(5.8)	14	-			
					Arthropoda	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	<i>Macromia amphigena</i>	38	0.014	Larva(Dragonfly larva)	-	-	-	-	-	-	-	-	-
					Arthropoda	Insecta	Odonata	Gomphidae	<i>Sylogomphus suzukii</i>	<i>Sylogomphus suzukii</i>												
					Arthropoda	Insecta	Odonata	Gomphidae	<i>Sieboldius albardae</i>	<i>Sieboldius albardae</i>												
					Arthropoda	Insecta	Odonata	Gomphidae	<i>Davidius sp.</i>	<i>Davidius</i>												
					Arthropoda	Insecta	Odonata	Libellulidae	<i>Sympetrum sp.</i>	<i>Sympetrum</i>												
					Arthropoda	Insecta	Odonata	Aeshnidae	<i>Boyeria maclachlani</i>	<i>Boyeria maclachlani</i>												
					Arthropoda	Insecta	Odonata	Aeshnidae	<i>Planaeschna milnei milnei</i>	<i>Planaeschna milnei milnei</i>												
					Arthropoda	Malacostraca	Decapoda	Cambaridae	<i>Procambarus clarkii</i>	Red swamp crawfish	5	0.045	Juvenile,Imago	-	-	-	13	N.D.(1.4)	13	-		
					Arthropoda	Malacostraca	Decapoda	Palaemonidae	<i>Palaemon paucidens</i>	Common prawn	75	0.072	Imago	-	-	-	2.7	N.D.(0.71)	2.7	-		
					Arthropoda	Malacostraca	Decapoda	Atyidae	<i>Paratya improvisa</i>	Freshwater shrimp	91	0.028	Juvenile,Imago	-	-	-	7.2	N.D.(1.9)	7.2	-		
					Arthropoda	Malacostraca	Decapoda	Varunidae	<i>Eriocheir japonica</i>	Japanese mitten crab	18	0.26	Juvenile	-	-	-	4.3	N.D.(0.40)	4.3	-		
					Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	<i>Anguilla japonica</i>	Japanese eel	1	0.18	Mature fish	Red swamp crawfish	Viscera removed	10.49	0.49	10	-			
					Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	<i>Anguilla japonica</i>	Japanese eel	1	0.30	Mature fish	Empty stomach	Viscera removed	15.67	0.67	15	-			
					Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	<i>Anguilla japonica</i>	Japanese eel	1	0.39	Mature fish	Empty stomach	Viscera removed	13.60	0.60	13	-			
					Vertebrata	Osteichthyes	Scorpaeniformes	Cottidae	<i>Cottus reinii</i>	Sculpin	3	0.012	Immature fish	-	-	-	3.8	N.D.(2.5)	3.8	-		
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	15	0.33	Immature fish,Mature fish	Obscure digesta	Viscera removed	7.27	0.47	6.8	-			
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Opsariichthys platypus</i>	Pale chub	2	0.025	Immature fish	-	-	-	6.3	N.D.(2.0)	6.3	-		
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Candidia temminckii</i>	Dark chub	11	0.12	Immature fish,Mature fish	-	-	-	6.6	N.D.(0.52)	6.6	-		
					Vertebrata	Osteichthyes	Cypriniformes	Cobitidae	<i>Cobitis biwae</i>	Cobitis biwae	11	0.030	Immature fish,Mature fish	-	-	-	4.4	N.D.(1.7)	4.4	-		
					Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Plecoglossus altivelis altivelis</i>	Sweetfish	250	2.5	Immature fish	-	-	-	6.2	N.D.(0.58)	6.2	0.13		
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Gymnogobius urotaenia</i>	Goby	16	0.079	Immature fish,Mature fish	-	-	-	9.88	0.98	8.9	-		
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius fluviatilis</i>	Rhinogobius fluviatilis	131	0.18	Immature fish,Mature fish	-	-	-	4.7	N.D.(0.59)	4.7	-		
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius nagoyae</i>	<i>Rhinogobius nagoyae</i>												
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Tridentiger brevispinis</i>	Dusky tripletooth goby	2	0.018	Mature fish	-	-	-	5.7	N.D.(2.6)	5.7	-		
					Vertebrata	Osteichthyes	Siluriformes	Bagridae	<i>Tachysurus tokiensis</i>	Cut-tailed bullhead	1	0.023	Mature fish	-	-	-	5.0	N.D.(2.3)	5.0	-		
					Vertebrata	Cephalaspidomorphi	Petromyzontiformes	Petromyzontidae	<i>Lethenteron reissneri</i>	Far eastern brook lamprey	13	0.049	Ammocoetes(larva)	-	-	-	1.7	N.D.(0.97)	1.7	-		
Vertebrata	Amphibia	Anura	Lithobates	<i>Lithobates catesbeianus</i>	American bullfrog	1	0.62	Imago	-	-	-	31.5	1.5	30	-							
				Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	-	0.20	-	-	-	7.5	N.D.(0.47)	7.5	-			

\*1: Organisms were collected in or around the targeted water areas.

\*2: When multiple types of aquatic organisms were collected, a sample was prepared by mixing them.

\*3: For a sample made of multiple types of aquatic organisms, the English name of the dominant one largest in number is underlined.

\*4: Basically, measurement was conducted for all organism samples. Viscera (stomach and bowels) were removed for the measurement when possible so that undigested food and sediments, etc. in the digestive system would be excluded.

\*5: Plankton (suspended algae) is the residue remaining after the filtration of lake water or seawater with a plankton net (40µm-mesh).

\*6: River bottom materials (incl. algae) are algae, etc. that were scratched off stones with a brush, etc. and may include very fine particles such as inorganic silt and clay.

\*7: N.D. means to be below the detection limit and figures in parentheses show the detection limit.

\*8: Activity concentrations include counting errors, but the details are omitted here.