Table A2. Overview of the structure of the RCSC et al's Remote Camera Metadata Template (2024) including both the data fields recommended by the Remote Camera Survey Guidelines: Guidelines for Western Canada (RCSC et al., 2024) and these metadata standards.

Survey Guidelines	Metadata Standards	Data Group	Visit Type	Field Code	Data Type	Data Format[1]	Example
Project Name	Project Name	Visit Metadata	Both	proj_name	[alphanumeric]	[Ideally recorded as: "abbreviated organization name"_" brief project name"_"project start year"]	uofa_oilsands_2018
Project Coordinator	Project Coordinator	-	-	proj_coord	[text]	-	John Smith
Project Coordinator Email	Project Coordinator Email	-	-	proj_coord_email	[text]	-	John.Smith@telus.net
Project Description	Project Description	-	-	proj_desc	[text]	-	To compare wolf occupancy in the oil sands region of north-eastern Alberta in two areas with high energy development and two reference areas with little development.
Study Area Name	Study Area Name	-	-	study_area_name	[alphanumeric]	-	oilsands_ref1
Study Area Description	Study Area Description	-	-	study_area_desc	[text]	-	Located in the SE corner of Birch Mountains Wildland Provincial Park in Boreal Highlands subregion. Bogs, pine, aspen and birch forest. No land use disturbance.
Survey Name	Survey Name	-	-	surv_name	[alphanumeric]	-	fortmc_1
Survey Objectives	Survey Objectives	-	-	surv_obj	[text]	-	To monitor trends in wolf occupancy at 5-year intervals from January – December 2020 to 2023.
Target Species	Target Species	-	-	target_species	[categorical; one-to-many]	[Refer to "species" in "species_crosswalk"]	gray wolf

Survey Guidelines	Metadata Standards	Data Group	Visit Type	Field Code	Data Type	Data Format[1]	Example
Survey Design	Survey Design	-	-	surv_design	[categorical; one-to-one]	Simple Random, Systematic, Stratified, Clustered, Paired, Targeted, Convenience, Hierarchical (Multiple)¶, Other¶, Unknown	Hierarchical (multiple)¶
*Survey Design Description	*Survey Design Description	-	-	surv_design_desc	[text]	-	survey_design[Systematic, Convenience]. One camera location within each township. Each location within 100m of a secondary road or cutline. Lure dispensers with Gorman's Gumbo (long line) at each camera location during initial camera deployment and not revisited during the survey period.
Event Type	Event Type	-	-	event_type	[categorical; one-to-one]	Tag, Image, Sequence	Tag
Sample Station Name	Sample Station Name	Visit Metadata	Both	samp_st_name	[alphanumeric]	[leave blank if NA]	ss1
Camera Location Name	Camera Location Name			cam_loc_name	[alphanumeric]	-	bh1
Latitude Camera Location	Latitude Camera Location		Deployment	cam_loc_lat	[decimal]	[5 decimal places]	53.78136
Longitude Camera Location	Longitude Camera Location			cam_loc_long	[decimal]	[5 decimal places]	-113.46067
Easting Camera Location	Easting Camera Location			cam_loc_east	[integer]	[no decimal places]	337875
Northing Camera Location	Northing Camera Location			cam_loc_north	[integer]	[no decimal places]	5962006
UTM Zone Camera Location	UTM Zone Camera Location			cam_loc_utm_zone	[alphanumeric]	["zone #"]	12

Survey Guidelines	Metadata Standards	Data Group	Visit Type	Field Code	Data Type	Data Format[1]	Example
GPS Unit Accuracy	GPS Unit Accuracy			gps_accuracy_m	[integer]	[metres]	5
*Access Method	-			access_method	[categorical; one-to-one]	Foot, ATV, Argo, Truck, Snowmobile, Horse, Boat, Helicopter, Unknown	Foot
*Camera Location Comments	*Camera Location Comments		Both	cam_loc_comments	[text]	-	snowmobile trail
Deployment Name	Deployment Name	Visit Metadata	Both	deploy_name	[alphanumeric]	[ideally recorded as: "Camera Location Name"_"Deployment Start Date" (or …_"Deployment End Date")]	bh1_17-Jan-2018
Purpose Of Visit	-		Service/ Retrieval	visit_type	[categorical; one-to-one]	Deployment, Service, Retrieval	Deployment
Deployment Crew	Deployment Crew		Both	deploy_crew	[text]	-	Susie Smith
Service/Retrieval Crew	Service/Retrieval Crew		Service/ Retrieval	service_retrieval_crew	[text]	-	John Smith
Deployment Start Date Time	Deployment Start Date Time		Both	deploy_start_date_time	[date/time]	[DD-MMM-YYYY HH:MM:SS]	17-Jan-2018 10:34:22
Deployment End Date Time	Deployment End Date Time			deploy_end_date_time	[date/time]	[DD-MMM-YYYY HH:MM:SS]	27-Jan-2019 23:00:00
*Visit Comments	*Visit Comments			visit_comments	[text]	-	-
*Deployment Comments	-		Deployment	deploy_comments	[text]	-	applied Gorman's Gumbo lure
*Service/Retrieval Comments	-		Service/ Retrieval	service_retrieval_comments	[text]	-	reapplied Gorman's Gumbo lure
Camera ID	Camera ID	Equipment Information	Deployment	cam_id	[alphanumeric]	-	reconpc900_1
Camera Make	Camera Make			cam_make	[text]	-	Reconyx
Camera Model	Camera Model			cam_model	[text]	-	PC900
Camera Serial Number	Camera Serial Number			cam_serial	[text]	-	P900FF04152022
*SD Card ID	-		Both	sd_card_id	[alphanumeric]	-	cmu_100

Survey Guidelines	Metadata Standards	Data Group	Visit Type	Field Code	Data Type	Data Format[1]	Example
*Key ID	-		Deployment	key_id	[alphanumeric]	-	python1
*Security	-			security	[categorical; one-to-one]	Security Box, Bracket, Bracket + Screws, None	Security Box
*Camera Active On Arrival	-		Service/ Retrieval	cam_active_arrival	[categorical; one-to-one]	Y, N	Y
*Camera Damaged	-			cam_damaged	[categorical; one-to-one]	Physical‡, Mechanical‡, None	Physical
*SD Card Status (% Full)	-			sd_status	[integer]	[%]	56
*# Of Images	-			sd_img_count	[integer]	[count]	1567
*SD Card Replaced	-			sd_card_replaced	[categorical; one-to-one]	Y, N	Y
*Remaining Battery (%)	-			battery_percent	[integer]	[%]	99
*Batteries Replaced	-			batteries_replaced	[categorical; one-to-one]	Y, N	Y
New Camera ID	-			new_cam_id	[alphanumeric]	[leave blank if NA]	-
New Camera Make	-			new_cam_make	[text]	[leave blank if NA]	-
New Camera Model	-			new_cam_model	[text]	[leave blank if NA]	-
New Camera Serial Number	-			new_cam_serial	[text]	[leave blank if NA]	-
*New SD Card ID	-			new_ sd_card_id	[alphanumeric]	[leave blank if NA]	-
Trigger Mode(s)	Trigger Mode(s)	Camera Settings	Deployment	set_trig_modes	[categorical; one-to-one]	Motion Image, Time-lapse Image, Video, Motion Image + Time-lapse Image, Motion Image + Time-lapse Image + Video, Time-lapse Image + Video, Motion Image + Video	Motion Image + Time-lapse Image
*Video Length	*Video Length			set_video_length_s	[integer]	[seconds; leave blank if NA]	5

Survey Guidelines	Metadata Standards	Data Group	Visit Type	Field Code	Data Type	Data Format[1]	Example
Trigger Sensitivity	Trigger Sensitivity			set_trig_sensitivity	[categorical; one-to-one]	Low, Low/Med, Med, Med/High, High, Very High, Unknown	High
Photos Per Trigger	Photos Per Trigger			set_photos_per_trig	[integer]	[count]	3
Motion Image Interval	Motion Image Interval			set_motion_img_int_s	[integer]	[seconds; "0" if not set]	0
Quiet Period	Quiet Period			set_quiet_period_s	[integer]	[seconds; "0" if not set]	30
Camera Height	Camera Height	Placement		cam_ht_m	[decimal]	[metres; to the nearest 0.05 m]	1
*Camera Direction	*Camera Direction			cam_dir_deg	[integer]	[degrees]	0
*Camera Attachment	-			cam_attachment	[categorical; one-to-one]	Tree, Post, Tree + Bungee/Strap, Tree + Screws, Post + Bungee/Strap, Post + Screws, Other†	Tree + Screws
*Stake Distance	*Stake Distance			stake_dist_m	[decimal]	[metres; to the nearest 0.05 m; leave blank if NA]	4.95
FOV Target Feature	FOV Target Feature			fov_target	[categorical; one-to-one]	Game Trail, Hiking Trail, Off-Highway Vehicle Trail, Paved Road, Dirt/Gravel Road, Road Crossing, Railway, Cutline/Seismic Line, Transmission Line, Pipeline, Wellsite, Culvert, Beaver Dam, Burrow/Den, Nest, Carcass, Natural Mineral Lick, Rub Post, Other, None, Unknown	Off-Highway Vehicle Trail
*FOV Target Feature Distance	*FOV Target Feature Distance			fov_target_dist_m	[decimal]	[metres; to the nearest 0.05 m; leave blank if NA]	10
Bait/Lure Type	Bait/Lure Type		Both	bait_lure_type	[categorical; one-to-one]	Scent, Meal, Bait Tree, Visual, Acoustic, Other‡, None, Unknown	Scent

Survey Guidelines	Metadata Standards	Data Group	Visit Type	Field Code	Data Type	Data Format[1]	Example
*Camera Location Characteristic(s)	*Camera Location Characteristic(s)	Site Characteristics	Deployment	cam_loc_chars	[categorical; one-to-many]	Trail, Road, Railway/Pipeline/Transmission Line, Cutline/Seismic Line, Wellsite, Clearcut, Building, Forest - Deciduous, Forest - Coniferous, Forest - Mixedwood, Forest - Undefined, Meadow, Burn, Agriculture, Shrubland, Beaver Dam, Wetland, Lentic, Lotic, Other†, Unknown	Building, Forest - Mixedwood, Road, Trail
*Deployment Area Photos Taken	-			deploy_area_photos_taken	[categorical; one-to-one]	Y, N	Y
*Deployment Area Photo Numbers	-			deploy_area_photo_numbers	[text]	[leave blank if NA]	4
*Test Image Taken	-	Equipment Checks	Both	test_image_taken	[categorical; one-to-one]	Y, N	Y
*Walktest Complete	-			walktest_complete	[categorical; one-to-one]	Y, N	Y
*Walktest Distance	*Walktest Distance			walktest_dist_m	[decimal]	[metres; to the nearest 0.05 m; leave blank if NA]	4.95
*Walktest Height	*Walktest Height			walktest_ht_m	[decimal]	[metres; to the nearest 0.05 m; leave blank if NA]	0.75
*Camera Active On Departure	-	Equipment Information	Deployment	cam_active_departure	[categorical; one-to-one]	Y, N	Y
Image Set Start Date Time	Image Set Start Date Time	Image Set	-	img_set_start_date_time	[date/time]	[DD-MMM-YYYY HH:MM:SS]	17-Jan-2018 12:00:02
Image Set End Date Time	Image Set End Date Time	Image Set	-	img_set_end_date_time	[date/time]	[DD-MMM-YYYY HH:MM:SS]	17-Jan-2019 22:10:05
*Deployment Image Count	*Deployment Image Count	Image Set	-	deploy_img_count	[integer]	[count]	1567

Survey Guidelines	Metadata Standards	Data Group	Visit Type	Field Code	Data Type	Data Format[1]	Example
Image Name	Image Name	-	-	img_name	[alphanumeric]	[Ideally recorded as: "Deployment Name"_"Camera Serial Number"_"Image Sequence Date Time"_"Image Number" - OR - "Deployment Name"_"Image Sequence Date Time"_"Image Number"]	bh1_17-Jul-2018_22-Jul-2018_10:34:22_img_100
Sequence Name	Sequence Name	-	-	seq_name	[alphanumeric]	[Ideally recorded as: "Deployment Name"_"img_#[name of first image in sequence]"_"img_#[name of last image in sequence]"; leave blank if NA]	bh1_22-Jul-2018_img_001-img_005
Analyst	Analyst	-	-	analyst	[text]	-	Susie Smith
Species	Species	-	-	species	[categorical; one-to-one]	[Refer to "species" in "species_crosswalk"; "NONE" if no species]	COYOTE
Individual Count	Individual Count	-	-	individual_count	[integer]	[count]	2
Age Class	Age Class	-	-	age_class	[categorical; one-to-one]	Adult, Juvenile, Subadult - Young of Year, Subadult - Yearling, Subadult, Unknown	Adult
Sex Class	Sex Class	-	-	sex_class	[categorical; one-to-one]	Male, Female, Unknown	Male
*Behaviour	*Behaviour	-	-	behaviour	[categorical; one-to-one]	Travelling, Standing, Running, Bedding, Drinking, Feeding/Foraging, Territorial Display, Rutting/Mating, Vigilant, Inspecting Camera, Inspecting (Non-Specified), Unknown, Other§, Multiple§, Unknown	Travelling
*Animal ID	*Animal ID	-	-	animal_id	[alphanumeric]	[blank if NA]	individual_1

Survey Guidelines	Metadata Standards	Data Group	Visit Type	Field Code	Data Type	Data Format[1]	Example
*Human Transport Mode/Activity	*Human Transport Mode/Activity	-	-	human_tpt_mode_activity	[categorical; one-to-one]	Activity - Walking, Activity - Hiking, Activity - Running, Activity - Cycling, Activity - Skiing, Activity - Snowshoeing, Activity - Fishing, Activity - Hunting, Activity - Unspecified, Transport - Horse/Mule, Transport - Off-Road/All-Terrain Vehicle, Transport - Passenger Vehicle, Transport - Large Commercial Vehicle/Heavy Equipment, Transport - Unspecified, Activity/Transport - Other§, Unknown	Activity - Walking
*Image/Sequence Comments	*Image/Sequence Comments	-	-	img_seq_comments	[text]	-	Behaviour[Inspecting Camera,Travelling]
*Image Trigger Mode	*Image Trigger Mode	-	-	img_trig_mode	[categorical; one-to-one]	Motion Detection, Time Lapse, CodeLoc Not Entered, External Sensor, Unknown	Motion Detection
*Image Sequence	*Image Sequence	-	-	img_sequence	[text]	[e.g., "0 of 0", "1 of 1", "0 of 0"; leave blank if not applicable.]	1 of 3
*Image Infrared Illuminator	*Image Infrared Illuminator	-	-	img_infrared_illum	[categorical; one-to-one]	On, Off, Unknown	On
*Image Flash Output	*Image Flash Output	-	-	img_flash	[text]	[e.g., "Flash did not fire, Auto"; "Unknown" if not known; leave blank if not applicable]	Flash did not fire, Auto
Image/Sequence Date Time	Image/Sequence Date Time	-	-	img_seq_date_time	[date/time]	[DD-MMM-YYYY HH:MM:SS]	22-Jul-2018 11:02:02

[1] The symbols refer to the field in which to provide additional information. I.e., † = in Camera Location Comments; ‡ = deployment OR service/retrieval comments; § = Image/Sequence Comments; ¶ = Survey Design Description