



MEDIASpelagicTrawl

Table medbs_rdb_schema.medias_pelagic_trawl_bio_individual			
Idx	Name	Data Type	Description
Biological parameters at individual level			
* Pk	survey_name	varchar(14)	Survey name (e.g. MEDIAS)
* Pk	cd_country	varchar(3)	Country ISO 3166 international standard
* Pk	gsa	varchar(7)	GFCM Geographical subarea
* Pk	survey_area	varchar(32)	Survey area (may extend more than one GSA, e.g. Iberian coast)
* Pk	geographical_stratum	varchar(32)	Geographical stratum (area inside a GSA and survey area)
* Pk	cd_centre	varchar(14)	Research center code
* Pk	cd_inst	varchar(14)	Research institute code
* Pk	cd_vessel	varchar(12)	Vessel
* Pk	sampling_year	smallint	Sampling year
* Pk	cd_cruise	varchar(14)	Cruise code
* Pk	gear	varchar(14)	Gear
* Pk	haul_id	varchar(14)	Haul ID
* Pk	species	varchar(7)	Species code according to ASFIS FAO
* Pk	individual_id	varchar(128)	Unique ID in database – [Survey name] [Country] [GSA] [Survey area] [Geo Stratum] [Centre] [Institute] [Vessel] [Cruise] [Haul] [Species] [Stage] [Sex] [Length] [individual number]
	individual_total_length	smallint	Individual total length
	individual_total_weight	numeric(6,2)	Individual total weight
	individual_eviscerated_weight	numeric(6,2)	Individual eviscerated weight
	sex	char(1)	Sex
	maturity	varchar(3)	Maturity
	age	smallint	Age
	gonad_weight	numeric(5,2)	Gonad weight
	stomach_weight	numeric(5,2)	Stomach weight
	notes	varchar(1024)	Notes
Indexes			
Type	Name	On	Description
Pk	medias_pelagic_trawl_bio_individual_pkey	survey_name, cd_country, gsa, survey_area, geographical_stratum, cd_centre, cd_inst, cd_vessel, sampling_year, cd_cruise, gear, haul_id, species, individual_id	
Foreign Keys			
Type	Name	On	Description
	cd_inst_fk\$p_fishery_body_departments (cd_inst) ref p_fishery_body_departments (department)		
	cd_vessel_fk\$rv_eurofleets (cd_vessel) ref rv_eurofleets (vessel_code)		
	fk_pel_trawl_individ\$pel_trawl_haul (survey_name, cd_country, gsa, survey_area, geographical_stratum, cd_centre, cd_inst, cd_vessel, sampling_year, cd_cruise, gear, haul_id) ref medias_pelagic_trawl_haul (survey_name, cd_country, gsa, survey_area, geographical_stratum, cd_centre, cd_inst, cd_vessel, sampling_year, cd_cruise, gear, haul_id)		

Table medbs_rdb_schema.medias_pelagic_trawl_bio_individual

```

geo_stratum_fk$p_medias_geo_stratum (
geographical_stratum ) ref p_medias_geo_stratum (
geo_stratum_code )

gsa_fk$p_fdi_subregion ( gsa ) ref p_fdi_subregion (
subregion_cd )

pelagic_trawl_individ_country_fk$p_country3166 (
cd_country ) ref p_countries_iso3166 ( country_a3code )

pt_gear_fk$p_medias_trawl ( gear ) ref p_medias_trawl (
gear )

survey_area_fk$p_medias_survey_area ( survey_area ) ref
p_medias_survey_area ( survey_area_code )

survey_name_fk$p_surveys ( survey_name ) ref p_surveys
( survey_code )

species_fk$species_list_medias ( species ) ref
species_list_medias ( species )

maturity_fk$p_nikolsky ( maturity ) ref p_nikolsky (
maturity )

cd_centre_fk$p_fishery_bodies_acronym ( cd_centre ) ref
p_fishery_bodies ( acronym )

```

Constraints

Name	Definition	Description
chk_individ_total_length	(individual_total_length)::numeric >= (20)::numeric) AND ((individual_total_length)::numeric <= (1000)::numeric	
chk_individ_total_weight	individual_total_weight > (0)::numeric) OR (individual_total_weight = ('-1'::integer)::numeric	
chk_individual_eviscerated_weight	(individual_eviscerated_weight > (0)::numeric) AND (individual_eviscerated_weight < (500)::numeric)) OR (individual_eviscerated_weight = ('-1'::integer)::numeric	
chk_gonad_weight	(gonad_weight > (0)::numeric) OR NULL::boolean	
chk_sex	(sex = ANY (ARRAY['M'::bpchar, 'F'::bpchar, 'U'::bpchar])) OR NULL::boolean	
chk_stomach_weight	(stomach_weight > (0)::numeric) OR NULL::boolean	

Table medbs_rdb_schema.medias_pelagic_trawl_bio_individual

```

chk_maturity      ((maturity)::text = ANY
                   (ARRAY[('I'::character
                           varying)::text,
                           ('II'::character
                           varying)::text,
                           ('III'::character
                           varying)::text,
                           ('IV'::character
                           varying)::text,
                           ('V'::character
                           varying)::text,
                           ('VI'::character
                           varying)::text,
                           ('1'::character
                           varying)::text,
                           ('2'::character
                           varying)::text,
                           ('3'::character
                           varying)::text,
                           ('4'::character
                           varying)::text,
                           ('5'::character
                           varying)::text,
                           ('6'::character
                           varying)::text])) OR
                   NULL::boolean

```

Table medbs_rdb_schema.medias_pelagic_trawl_haul

Idx	Name	Data Type	Description
MEDIAS pelagic trawl: basic information by haul			
* PK	survey_name	varchar(14)	Survey name (e.g. MEDIAS)
* PK	cd_country	varchar(3)	Country ISO 3166 international standard
* PK	gsa	varchar(7)	GFCM Geographical subarea
* PK	survey_area	varchar(32)	Survey area (may extend more than one GSA, e.g. Iberian coast)
* PK	geographical_stratum	varchar(32)	Geographical stratum (area inside a GSA and survey area)
* PK	cd_centre	varchar(14)	Research center code
* PK	cd_inst	varchar(14)	Research institute code
* PK	cd_vessel	varchar(12)	Vessel
* PK	sampling_year	smallint	Sampling year
* PK	cd_cruise	varchar(14)	Cruise code
* PK	gear	varchar(14)	Gear
* PK	haul_id	varchar(14)	Haul ID
*	vhaul_id	varchar(64)	Virtual haul ID
	latitude	numeric(7,4)	Latitude
	longitude	numeric(7,4)	Longitude
	bottom_depth_start	smallint	Bottom depth start
	bottom_depth_end	smallint	Bottom depth end
	sampling_date	date	Sampling date
	time_start	timestamp	Time start (when the net is operational)
	time_end	timestamp	Time end (when the net is hauling)
	duration	smallint	Duration (hauling duration)
	average_fishing_speed	numeric(5,2)	Average fishing speed
	net_average_depth	numeric(4,1)	Net average depth
	net_horizontal_opening	numeric(5,2)	average values of Net horizontal opening (in m) (optional)
	net_vertical_opening	numeric(5,2)	average values of Net vertical opening (in m) (optional)
	calibration_id	smallint	The echosounder calibration identification code (e.g. 1, 2). Used to associate acoustic integration data in other tables with the specific instrument calibration applied during data collection & analysis.

Table medbs_rdb_schema.medias_pelagic_trawl_haul

Indexes

Type	Name	On	Description
Pk	medias_pelagic_trawl_haul_pkey	survey_name, cd_country, gsa, survey_area, geographical_stratum, cd_centre, cd_inst, cd_vessel, sampling_year, cd_cruise, gear, haul_id	

Foreign Keys

Type	Name	On	Description
	cd_centre_fk\$p_fishery_bodies_acronym (cd_centre) ref p_fishery_bodies (acronym)		
	cd_inst_fk\$p_fishery_body_departments (cd_inst) ref p_fishery_body_departments (department)		
	cd_vessel_fk\$rv_eurofleets (cd_vessel) ref rv_eurofleets (vessel_code)		
	geo_stratum_fk\$p_medias_geo_stratum (geographical_stratum) ref p_medias_geo_stratum (geo_stratum_code)		
	gsa_fk\$p_fdi_subregion (gsa) ref p_fdi_subregion (subregion_cd)		
	pelagic_trawl_haul_country_fk\$p_country3166 (cd_country) ref p_countries_iso3166 (country_a3code)		
	pt_gear_fk\$p_medias_trawl (gear) ref p_medias_trawl (gear)		
	survey_area_fk\$p_medias_survey_area (survey_area) ref p_medias_survey_area (survey_area_code)		
	survey_name_fk\$p_surveys (survey_name) ref p_surveys (survey_code)		

Constraints

Name	Definition	Description
chk_bottom_depth_end	bottom_depth_end >= 10) AND (bottom_depth_end <= 1500	
chk_bottom_depth_start	bottom_depth_start >= 10) AND (bottom_depth_start <= 1500	
chk_calibration_id	(calibration_id >= 1) AND (calibration_id <= 999)) OR (calibration_id = '-1'::integer	
chk_duration	duration >= 10) AND (duration <= 180	
chk_average_fishing_speed	average_fishing_speed >= 1.5) AND (average_fishing_speed <= (7)::numeric	
chk_longitude	longitude >= '-5.50'::numeric) AND (longitude <= 35.00	
chk_net_average_depth	net_average_depth >= (5)::numeric) AND (net_average_depth <= (800)::numeric	
chk_net_horizontal_opening	net_horizontal_opening >= (5)::numeric) AND (net_horizontal_opening <= (30)::numeric	
chk_net_vertical_opening	net_vertical_opening >= (1)::numeric) AND (net_vertical_opening <= (25)::numeric	

Table medbs_rdb_schema.medias_pelagic_trawl_haul

chk_latitude latitude >= 34.00) AND
(latitude <= 45.70

Table medbs_rdb_schema.medias_pelagic_trawl_length_classes

Idx	Name	Data Type	Description
MEDIAS pelagic trawl length classes			
* PK	survey_name	varchar(14)	Survey name (e.g. MEDIAS)
* PK	cd_country	varchar(3)	Country ISO 3166 international standard
* PK	gsa	varchar(7)	GFCM Geographical subarea
* PK	survey_area	varchar(32)	Survey area (may extend more than one GSA, e.g. Iberian coast)
* PK	geographical_stratum	varchar(32)	Geographical stratum (area inside a GSA and survey area)
* PK	cd_centre	varchar(14)	Research center code
* PK	cd_inst	varchar(14)	Research institute code
* PK	cd_vessel	varchar(12)	Vessel
* PK	sampling_year	smallint	Sampling year
* PK	cd_cruise	varchar(14)	Cruise code
*	gear	varchar(14)	Gear
* PK	haul_id	varchar(14)	Haul ID
* PK	species	varchar(7)	Species code according to ASFIS FAO
* PK	size_category	char(1)	
* PK	length_class	smallint	Length class
	n_at_length	smallint	Number at length (estimated n of individuals at length class)
	weight_at_length	smallint	Weight at length (in g, estimated by haul)
	n_sampled	smallint	Number sampled (N of individuals measured)

Indexes

Type	Name	On	Description
Pk	medias_pelagic_trawl_length_cl asses_pkey	survey_name, cd_country, gsa, survey_area, geographical_stratum, cd_centre, cd_inst, cd_vessel, sampling_year, cd_cruise, haul_id, species, size_category, length_class	

Foreign Keys

Type	Name	On	Description
	species_fk\$species_list_medias (species) ref species_list_medias (species)		
	cd_centre_fk\$p_fishery_bodies_acronym (cd_centre) ref p_fishery_bodies (acronym)		
	cd_inst_fk\$p_fishery_body_departments (cd_inst) ref p_fishery_body_departments (department)		
	cd_vessel_fk\$rv_eurofleets (cd_vessel) ref rv_eurofleets (vessel_code)		
	fk_pel_trawl_length\$pel_trawl_species (survey_name, cd_country, gsa, survey_area, geographical_stratum, cd_centre, cd_inst, cd_vessel, sampling_year, cd_cruise, gear, haul_id, species, size_category) ref medias_pelagic_trawl_species (survey_name, cd_country, gsa, survey_area, geographical_stratum, cd_centre, cd_inst, cd_vessel, sampling_year, cd_cruise, gear, haul_id, species, size_category)		
	geo_stratum_fk\$p_medias_geo_stratum (geographical_stratum) ref p_medias_geo_stratum (geo_stratum_code)		

Table medbs_rdb_schema.medias_pelagic_trawl_length_classes

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gsa_fk$p_fdi_subregion ( gsa ) ref p_fdi_subregion (
subregion_cd )

pelagic_trawl_lc_country_fk$p_country3166 ( cd_country
) ref p_countries_iso3166 ( country_a3code )

pt_gear_fk$p_medias_trawl ( gear ) ref p_medias_trawl (
gear )

survey_area_fk$p_medias_survey_area ( survey_area ) ref
p_medias_survey_area ( survey_area_code )

survey_name_fk$p_surveys ( survey_name ) ref p_surveys
( survey_code )

```

Constraints

Name	Definition	Description
chk_length_class	(length_class)::numeric >= (20)::numeric) AND ((length_class)::numeric <= (1000)::numeric	
chk_n_at_length	n_at_length > 0	
chk_n_sampled	n_sampled > 0	
chk_size_category	size_category = ANY (ARRAY['S'::bpchar, 'L'::bpchar, 'C'::bpchar])	
chk_weight_at_length	weight_at_length >= 1) AND (weight_at_length <= 5000	

Table medbs_rdb_schema.medias_pelagic_trawl_species

Idx	Name	Data Type	Description
MEDIAS pelagic trawl species composition			
* PK	survey_name	varchar(14)	Survey name (e.g. MEDIAS)
* PK	cd_country	varchar(3)	Country ISO 3166 international standard
* PK	gsa	varchar(7)	GFCM Geographical subarea
* PK	survey_area	varchar(32)	Survey area (may extend more than one GSA, e.g. Iberian coast)
* PK	geographical_stratum	varchar(32)	Geographical stratum (area inside a GSA and survey area)
* PK	cd_centre	varchar(14)	Research center code
* PK	cd_inst	varchar(14)	Research institute code
* PK	cd_vessel	varchar(12)	Vessel
* PK	sampling_year	smallint	Sampling year
* PK	cd_cruise	varchar(14)	Cruise code
* PK	gear	varchar(14)	Gear
* PK	haul_id	varchar(14)	Haul ID
* PK	species	varchar(7)	Species code according to ASFIS FAO
* PK	size_category	char(1)	
	t_catch	numeric(10,4)	Catch (in Kg)
	percentage_weight	numeric(5,2)	Percentage weight (% w of some species in the haul)
	subsample_weight	numeric(5,2)	Subsample weight (in Kg)
	subsample_number	smallint	Subsample number
	species_mean_length	smallint	Species mean length (mm)
	species_mean_weight	integer	Species mean weight (g)
*	maturity_scale	varchar(14)	Maturity scale: ICES WKSPMAT, MEDITS

Indexes

Type	Name	On	Description
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Table medbs_rdb_schema.medias_pelagic_trawl_species

Pk medias_pelagic_trawl_species_p
key
survey_name, cd_country,
gsa, survey_area,
geographical_stratum,
cd_centre, cd_inst,
cd_vessel,
sampling_year,
cd_cruise, gear,
haul_id, species,
size_category

Foreign Keys

Type	Name	On	Description
	species_fk\$species_list_medias (species) ref species_list_medias (species)		
	cd_centre_fk\$p_fishery_bodies_acronym (cd_centre) ref p_fishery_bodies (acronym)		
	cd_inst_fk\$p_fishery_body_departments (cd_inst) ref p_fishery_body_departments (department)		
	cd_vessel_fk\$rv_eurofleets (cd_vessel) ref rv_eurofleets (vessel_code)		
	fk_pel_trawl_species\$pel_trawl_haul (survey_name, cd_country, gsa, survey_area, geographical_stratum, cd_centre, cd_inst, cd_vessel, sampling_year, cd_cruise, gear, haul_id) ref medias_pelagic_trawl_haul (survey_name, cd_country, gsa, survey_area, geographical_stratum, cd_centre, cd_inst, cd_vessel, sampling_year, cd_cruise, gear, haul_id)		
	geo_stratum_fk\$p_medias_geo_stratum (geographical_stratum) ref p_medias_geo_stratum (geo_stratum_code)		
	gsa_fk\$p_fdi_subregion (gsa) ref p_fdi_subregion (subregion_cd)		
	pelagic_trawl_species_country_fk\$p_country3166 (cd_country) ref p_countries_iso3166 (country_a3code)		
	pt_gear_fk\$p_medias_trawl (gear) ref p_medias_trawl (gear)		
	survey_area_fk\$p_medias_survey_area (survey_area) ref p_medias_survey_area (survey_area_code)		
	survey_name_fk\$p_surveys (survey_name) ref p_surveys (survey_code)		

Constraints

Name	Definition	Description
chk_percentage_weight	percentage_weight > (0)::numeric) AND (percentage_weight <= (100)::numeric)	
chk_size_category	size_category = ANY (ARRAY['S'::bpchar, 'L'::bpchar, 'C'::bpchar])	
chk_species_mean_length	(species_mean_length)::numeric > (0)::numeric	Specify max value (in the validation scheme max value per species should be provided by experts)
chk_maturity_scale	maturity_scale)::text = ANY ((ARRAY['ICES WKSPMAT'::character varying, 'MEDITS'::character varying])::text [])	
chk_subsample_number	(subsample_number >= 1) AND (subsample_number <= 200)) OR (subsample_number = '-1'::integer)	
chk_subsample_weight	subsample_weight > (0)::numeric) OR (subsample_weight = '-1'::integer)::numeric	

Table medbs_rdb_schema.medias_pelagic_trawl_species

chk_t_catch	t_catch > (0)::numeric
chk_species_mean_weight	(species_mean_weight)::numeric Specify max value (in the validation scheme max value per species should be provided by experts)