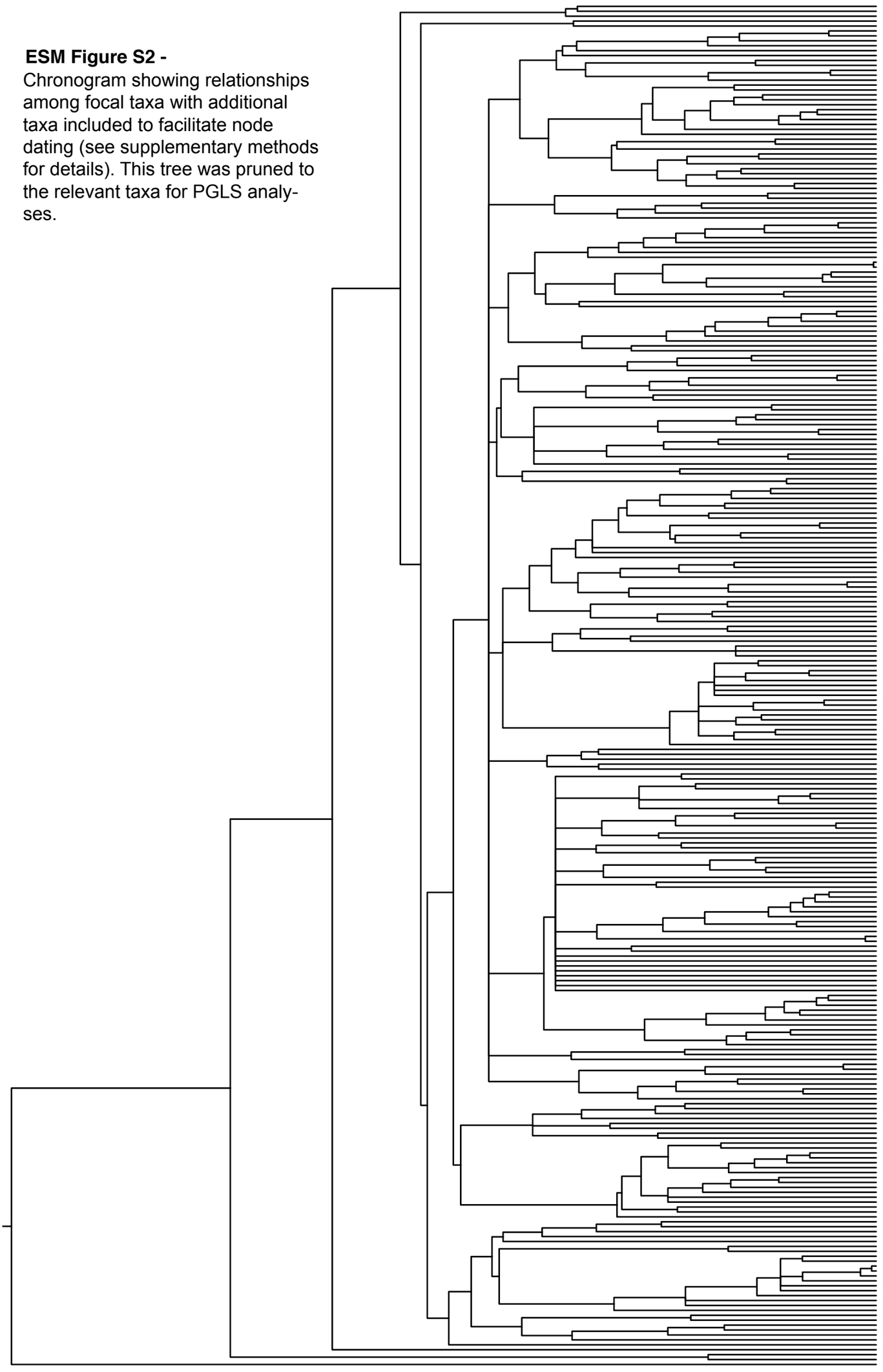
ESM Figure S2 -
Chronogram showing relationships among focal taxa with additional taxa included to facilitate node dating (see supplementary methods for details). This tree was pruned to the relevant taxa for PGLS analyses.


Ophidiidae_Lamprogrammus_scherbachevi
Ophidiidae_Dipholidon_scripsae
Carapidae_Echogobius_cryomargarite
Batrachoididae_Halobatrachus_didactylus
Acanthuridae_Porichthys_notatus
Acanthuridae_Acanthurus_bahianus
Acanthuridae_Acanthurus_chirurgus
Acanthuridae_Acanthurus_coeruleus
Acanthuridae_Prionurus_scalprus
Acanthuridae_Naso_vlamingii
Caracidae_Caracus_bonillus
Antennariidae_Antennarius_numifer
Antennariidae_Histrio_histrio
Lophiidae_Lophius_budegassa
Lophiidae_Lophius_americanus
Lophiidae_Lophius_piscatorius
Lutjanidae_Lutjanus_sebae
Lutjanidae_Lutjanus_erythropterus
Lutjanidae_Lutjanus_carponotatus
Lutjanidae_Lutjanus_vitta
Lutjanidae_Lutjanus_kasmira
Lutjanidae_Rhomboplites_aurorubens
Lutjanidae_Lutjanus_campechanus
Lutjanidae_Lutjanus_synagris
Lutjanidae_Oxyurus_chrysurus
Lutjanidae_Lutjanus_griseus
Caesionidae_Pterocaesio_digramma
Moronidae_Morone_saxatilis
Moronidae_Morone_americana
Moronidae_Dicentrarchus_labrax
Sparidae_Archosargus_probatocephalus
Sparidae_Archosargus_rhomboidalis
Sparidae_Acanthopagrus_latus
Sparidae_Calamus_brachysomus
Sparidae_Stenotomus_chrysops
Sparidae_Pagellus_bogaraveo
Sparidae_Pagrus_pagrus
Ammodytidae_Ammodytes_hexapterus
Ammodytidae_Ammodytes_tobianus
Haemulidae_Haemulon_plumieri
Haemulidae_Orthopristis_chrysoptera
Haemulidae_Anisotremus_davidsonii
Haemulidae_Pomadasys_peroteti
Anarhichadidae_Anarrhichthys_ocellatus
Anarhichadidae_Anarhichas_lupus
Cottidae_Enophrys_bison
Scorpaenidae_Scorpaena_guttata
Scorpaenidae_Pterois_volitans
Scorpaenidae_Scorpaenodes_xyris
Scorpaenidae_Pontinus_longispinis
Sebastidae_Sebastes_fuborvinctus
SerranidaeSerranus_Serranus_accraensis
Serranidae_Serranus_tigrinus
Serranidae_Paralabrax_maculatofasciatus
Serranidae_Paralabrax_clathratus
Serranidae_Paralabrax_nebulifer
Serranidae_Serranus_baldwini
Serranidae_Serranus_tabacarius
Serranidae_Serranus_tortugarum
Serranidae_Centropristis_striata
Serranidae_Sacura_margaritacea
Serranidae_Epinephelus_lanceolatus
Serranidae_Epinephelus_fasiata
Serranidae_Epinephelus_lanuma
Serranidae_Epinephelus_akaara
Serranidae_Epinephelus_areolus
Serranidae_Niphon_spinosus
Serranidae_Acanthistius_brasilianus
Serranidae_Bolanthias_chrysostictus
Serranidae_Pseudanthias_squamipinnis
Balistidae_Pseudobalistes_flavimarginatus
Balistidae_Xanthichthys_mento
Balistidae_Rhinecanthus_aculeatus
Balistidae_Balistes_capriscus
Monacanthidae_Thamnaconus_modestus
Monacanthidae_Thamnaconus_septentrionalis
Monacanthidae_Paramonacanthus_japonicus
Monacanthidae_Aluterus_monoceros
Monacanthidae_Oxymonacanthus_longirostris
Monacanthidae_Stephanolepis_cirrhifer
Diodontidae_Diodon_holocanthus
Diodontidae_Diodon_hystrix
Ostraciidae_Ostracion_meleagris
Ostraciidae_Lactoria_diaphana
Ostraciidae_Lactoria_fornasini
Ostraciidae_Acanthostracion_polygonius
Ostraciidae_Acanthostracion_quadricornis
Tetraodontidae_Lagocephalus_laevigatus
Tetraodontidae_Sphoeroides_maculatus
Tetraodontidae_Fugu_rubripes
Tetraodontidae_Canthigaster_valentini
Tetraodontidae_Canthigaster_rostrata
Molidae_Mola_mola
Priacanthidae_Priacanthus_arenatus
Priacanthidae_Priacanthus_fayenus
Siganidae_Siganus_vulpinus
Siganidae_Siganus_guttatus
Blennidae_Parablennius_pattorugine
Blennidae_Lipophrys_dalmatus
Blennidae_Parablennius_ruber
Blennidae_Hypsoblennius_brevipinnis
Blennidae_Hypsoblennius_hentz
Blennidae_Entomacrodus_chiostictus
Blennidae_Ophioblennius_macclurei
Dactyloscopidae_Gillellus_uranidea
Dactyloscopidae_Platygillellus_rubrocinctus
Labrisomidae_Paraclinus_integripinnis
Labrisomidae_Paraclinus_marthaluisae
Labrisomidae_Malacoctus_blanchardi
Opisthognathidae_Opistognathus_iucundus
Cryptocentridae_Cryptocentrus_fasciatus
Gobiesocidae_Apletodon_incognitus
Cryptocentridae_Cryptocentrus_cinctus
Gobiesocidae_Gobiesox_maeandricus
Grammatidae_Gramma_loreto
Pomacentridae_Stegastes_leucostictus
Pomacentridae_Hypsypops_rubicundus
Pomacentridae_Chromis_punctipinnis
Pomacentridae_Dascyllus_trimaculatus
Pomacentridae_Pomacentrus_coelestis
Pomacentridae_Pomacentrus_pavo
Pomacentridae_Amphiprion_melanopus
Pomacentridae_Abudefduf_saxatilis
Gerreidae_Gerres_japonicus
Gerreidae_Gerres_cinereus
Mugilidae_Mugil_cephalus
Mugilidae_Mugil_curema
Mugilidae_Liza_sp.
Bothidae_Arnoglossus_imperialis
Bothidae_Arnoglossus_laterna
Latridae_Lates_calcarifer
Soleidae_Solea_solea
Polynemidae_Pentanemus_quinquarius
Polynemidae_Eleutheronema_tetradactylum
Polynemidae_Polydactylus_sexfilis
Sciaenidae_Cynoscion_regius
Sciaenidae_Micropogonias_undulatus
Sciaenidae_Menticirrhus_saxatilis
Sciaenidae_Menticirrhus_undulatus
Sciaenidae_Seriphus_politus
Sciaenidae_Bairdiella_chrysura
Sciaenidae_Roncador_stearnsii
Sciaenidae_Leiostomus_xanthurus
Sciaenidae_Cynoscion_nebulosus
Sciaenidae_Cynoscion_arenarius
Sciaenidae_Atractoscion_nobilis
Sciaenidae_Larimus_fasciatus
Sciaenidae_Sciaenops_ocellatus
Sciaenidae_Bairdiella_ronchus
Sciaenidae_Pogonias_chromis
Sciaenidae_Pareques_umbrosus
Sciaenidae_Cheilotrema_saturnum
Sciaenidae_Umbrina_roncador
Sciaenidae_Micropogonias_undulatus
Kyphosidae_Girella_punctata
Kyphosidae_Microcanthus_strigatus
Chaetodontidae_Chaetodon_aculeatus
Chaetodontidae_Nemadactylus_macropterus
Labridae_Gymnocranius_griseus
Labridae_Anampses_caeleopunctatus
Labridae_Anampses_twistii
Labridae_Bodianus_axillaris
Labridae_Semicossyphus_pulcher
Labridae_Bodianus_diplotaenia
Labridae_Bodianus_pulchellus
Labridae_Bodianus_rufus
Labridae_Clepticus_parrae
Labridae_Halichoeres_bivittatus
Labridae_Epibulus_insidiator
Labridae_Cheilinus_oxycephalus
Labridae_Cheilinus_trilobatus
Labridae_Symphodus_roissali
Labridae_Stethojulis_interrupta
Labridae_Novaculichthys_taeniourus
Labridae_Xyrichtys_novacula
Labridae_Coris_julis
Labridae_Gomphosus_varius
Labridae_Thalassoma_bifasciatum
Labridae_Thalassoma_pavo
Labridae_Thalassoma_lucasanum
Labridae_Halichoeres_chlorovirgatus
Labridae_Halichoeres_bivittatus
Labridae_Halichoeres_melanurus
Labridae_Halichoeres_bivittatus
Labridae_Halichoeres_garnoti
Labridae_Halichoeres_poeyi
Labridae_Halichoeres_bivittatus
Labridae_Halichoeres_chierchiae
Labridae_Halichoeres_notospilus
Labridae_Halichoeres_dispilus
Labridae_Halichoeres_pictus
Labridae_Halichoeres_cyanocephalus
Labridae_Halichoeres_tenuispinis
Labridae_Pseudolabrus_japonicus
Labridae_Macropharyngodon_meleagris
Labridae_Doratonotus_megalepis
Labridae_Hemipteronotus_pavo
Labridae_Halichoeres_hortulanus
Labridae_Hemigymnus_fasciatus
Labridae_Abrichthys_unilineatus
Labridae_Labroides_dimidiatus
Labridae_Achnoglossus_maximus
Labridae_Pseudocheilinus_hexataenia
Labridae_Pteragogus_flagellifer
Scaridae_Scarus_iserani
Scaridae_Scarus_rubroviolaceus
Scaridae_Scarus_iseni
Scaridae_Chlorurus_sordidus
Scaridae_Scarus_schlegeli
Scaridae_Scarus_globiceps
Scaridae_Cetoscarus_bicolor
Scaridae_Sparisoma_aurofrenatum
Scaridae_Sparisoma_rubripinne
Scaridae_Sparisoma_atomarium
Scaridae_Sparisoma_radians
Malacanthidae_Lopholatilus_chamaeleonticeps
Malacanthidae_Branchiostegus_japonicus
Malacanthidae_Malacanthus_plumieri
Pomacanthidae_Pomacanthus_arcuatus
Pomacanthidae_Pomacanthus_paru
Pomacanthidae_Pomacanthus_maculosus
Pomacanthidae_Centropyge_bispinosus
Pomacanthidae_Centropyge_aurantia
Pomacanthidae_Genicanthus_lamarck
Pomacanthidae_Pomacanthus_maculosus
Pomacanthidae_Holacanthus_tricolor
Apogonidae_Apogon_doderleini
Apogonidae_Apogon_doderleini
Apogonidae_Apogon_doderleini