$\begin{tabular}{ll} C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb\\ Query:\ Edit\ -\ Bottom\ Depth\ 01 \end{tabular}$ 

Wednesday, December 18, 2019

Page: 1

# <u>SQL</u>

SELECT Station. Station, Count(Tow.BottomDepth) AS [Count], Avg(Tow.BottomDepth) AS Mean, Avg([BottomDepth])-2\*(StDev([BottomDepth])) AS [2 - Standard Devations], Avg([BottomDepth]))+2\*(StDev([BottomDepth])) AS [2 + Standard Devations] FROM Station INNER JOIN Tow ON Station.StationID = Tow.StationID GROUP BY Station.Station;

Page: 2

### <u>SQL</u>

SELECT IIf([Temp]<[2 - Standard Devations] Or [Temp]>[2 + Standard Devations],Yes,"") AS Outlier, Year([SampleDate]) AS [Year], Survey.Survey, Survey.SampleDate, Station.Station, Station.Temp, [Edit - Temp 01].Mean, [Edit - Temp 01].[2 - Standard Devations], [Edit - Temp 01].[2 + Standard Devations] FROM Survey INNER JOIN ((Station INNER JOIN [Edit - Temp 01] ON Station.Station = [Edit - Temp 01].Station) INNER JOIN Tow ON Station.StationID = Tow.StationID) ON Survey.SurveyID = Station.SurveyID GROUP BY IIf([Temp]<[2 - Standard Devations] Or [Temp]>[2 + Standard Devations],Yes,""), Year([SampleDate]), Survey.Survey, Survey.SampleDate, Station.Station, Station.Temp, [Edit - Temp 01].Mean, [Edit - Temp 01].[2 - Standard Devations] ORDER BY IIf([Temp]<[2 - Standard Devations] Or [Temp]>[2 + Standard Devations],Yes,"") DESC, Year([SampleDate]) DESC, Survey.Survey, Survey.SampleDate, Station.Station;

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Wednesday, December 18, 2019 Query: Edit - Temp Out Of Range

# <u>SQL</u>

SELECT Year([SampleDate]) AS [Year], Survey.SampleDate, Survey.Survey, Station.Station, Station.Temp FROM Survey INNER JOIN Station ON Survey.SurveyID = Station.SurveyID WHERE (((Station.Temp)<=8 Or (Station.Temp)>=27))
ORDER BY Year([SampleDate]) DESC, Survey.SampleDate, Survey.Survey, Station.Station;

Page: 3

#### <u>SQL</u>

SELECT IIf([TopEC]<[Lower Bound] Or [TopEC]>[Upper Bound], Yes,"") AS Outlier, Year([SampleDate]) AS [Year], Survey.Survey, Survey.SampleDate, Station.Station, Station.TopEC, [Edit - Top EC 01].AvgOfTopEC, [Edit - Top EC 01].[Lower Bound], [Edit - Top EC 01].[Upper Bound]
FROM (Survey INNER JOIN (Station INNER JOIN Tow ON Station.StationID = Tow.StationID) ON Survey.SurveyID = Station.SurveyID) INNER JOIN [Edit - Top EC 01] ON Station.Station = [Edit - Top EC 01].Station.Station

GROUP BY IIf([TopEC]<[Lower Bound] Or [TopEC]>[Upper Bound],Yes,""), Year([SampleDate]), Survey.Survey, Survey.SampleDate, Station.Station, Station.TopEC, [Edit - Top EC 01].AvgOfTopEC, [Edit - Top EC 01].[Lower Bound], [Edit - Top EC 01].[Upper Bound]

ORDER BY IIf([TopEC]<[Lower Bound] Or [TopEC]>[Upper Bound],Yes,"") DESC , Year([SampleDate]) DESC , Survey.Survey, Survey.SampleDate, Station.Station;

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Query: Edit - Top EC 01

Wednesday, December 18, 2019

Page: 5

## <u>SQL</u>

SELECT Station.Station, Count(Station.TopEC) AS [Count], qry\_TLT\_StationSD.AvgOfTopEC, qry\_TLT\_StationSD.TopECStDev, [AvgOfTopEC]-2\*[TopECStDev] AS [Lower Bound], [AvgOfTopEC]+2\*[TopECStDev] AS [Upper Bound]
FROM Station INNER JOIN qry\_TLT\_StationSD ON Station.Station=qry\_TLT\_StationSD.Station GROUP BY Station.Station, qry\_TLT\_StationSD.AvgOfTopEC, qry\_TLT\_StationSD.TopECStDev;

#### <u>SQL</u>

SELECT IIf([Turbidity]<[2 - Standard Devations] Or [Turbidity]>[2 + Standard Devations], Yes,"") AS Outlier, Year([SampleDate]) AS [Year], Survey.Survey, Survey.SampleDate, Station.Station, Station.Turbidity, [Edit - Turbidity 01].Mean, [Edit - Turbidity 01].[2 - Standard Devations], [Edit - Turbidity 01].[2 + Standard Devations]

FROM (Survey INNER JOIN (Station INNER JOIN Tow ON Station.StationID = Tow.StationID) ON Survey.SurveyID = Station.SurveyID) INNER JOIN [Edit - Turbidity 01] ON Station.Station = [Edit - Turbidity 01].Station

GROUP BY IIf([Turbidity]<[2 - Standard Devations] Or [Turbidity]>[2 + Standard Devations],Yes,""), Year([SampleDate]), Survey.Survey, Survey.SampleDate, Station.Station, Station.Turbidity, [Edit - Turbidity 01].Mean, [Edit - Turbidity 01].[2 - Standard Devations], [Edit - Turbidity 01].[2 + Standard Devations] ORDER BY IIf([Turbidity]<[2 - Standard Devations] Or [Turbidity]>[2 + Standard Devations],Yes,"") DESC, Year([SampleDate]) DESC, Survey.Survey, Survey.SampleDate, Station.Station;

 $\label{lem:c:standalone_WithQueries.accdb} C:\label{lem:c:wey_Standalone_WithQueries.accdb} Query: FTP\_Append\_1\_Survey$ 

Wednesday, December 18, 2019

Page: 7

# <u>SQL</u>

INSERT INTO Survey ( SurveyID, SampleDate, Survey, Comments ) IN 'U:\NativeFish\FTP Site Delta Smelt Folder\20-mm New\20mm\_New.mdb' SELECT Survey.SurveyID, Survey.SampleDate, Survey.Survey, Survey.Comments FROM Survey WHERE (((Survey.SampleDate)>#1/1/2018#));

## <u>SQL</u>

INSERT INTO Station ( StationID, SurveyID, Station, LatDeg, LatMin, LatSec, LonDeg, LonMin, LonSec, Temp, TopEC, BottomEC, Secchi, Turbidity, Comments ) IN 'U:\NativeFish\FTP Site Delta Smelt Folder\20-mm New\20mm\_New.mdb'

SELECT Station.StationID, Station.SurveyID, Station.Station.LatDeg, Station.LatMin, Station.LatSec, Station.LonDeg, Station.LonMin, Station.LonSec, Station.Temp, Station.TopEC, Station.BottomEC, Station.Secchi, Station.Turbidity, Station.Comments

WHERE (((Station.StationID)>8618));

# <u>SQL</u>

INSERT INTO Tow ( TowID, StationID, TowNum, TowTime, Tide, BottomDepth, CableOut, Duration ) IN 'U:\NativeFish\FTP Site Delta Smelt Folder\20-mm New\20mm\_New.mdb' SELECT Tow.TowID, Tow.StationID, Tow.TowNum, Tow.TowTime, Tow.Tide, Tow.BottomDepth, Tow.CableOut, Tow.Duration FROM Tow WHERE (((Tow.TowID)>25451));

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Wednesday, December 18, 2019 Page: 10

<u>SQL</u>

INSERT INTO Gear ( GearID, TowID, GearCode, MeterSerial, MeterStart, MeterEnd, MeterCheck ) IN 'U:\NativeFish\FTP Site Delta Smelt Folder\20-mm New\20mm\_New.mdb' SELECT Gear.GearID, Gear.TowID, Gear.GearCode, Gear.MeterSerial, Gear.MeterStart, Gear.MeterEnd, Gear.MeterCheck FROM Gear WHERE (((Gear.GearID)>33844));

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Query: FTP\_Append\_5\_LabSample Page: 11

## <u>SQL</u>

INSERT INTO LabSample ( LabSampleID, GearID, SampleCode, LabSampleType, ProcessDate, Processor, ProcessingTime, Comments ) IN 'U:\NativeFish\FTP Site Delta Smelt Folder\20-mm New\20mm\_New.mdb' SELECT LabSample.LabSampleID, LabSample.GearID, LabSample.SampleCode, LabSample.LabSampleType, LabSample.ProcessDate, LabSample.Processor, LabSample.ProcessingTime, LabSample.Comments FROM LabSample

WHERE (((LabSample.LabSampleID)>33239));

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Query: FTP\_Append\_6\_FishSample Page: 12

# <u>SQL</u>

INSERT INTO FishSample ( FishSampleID, LabSampleID, FishCode, Catch ) IN 'U:\NativeFish\FTP Site Delta Smelt Folder\20-mm New\20mm\_New.mdb' SELECT FishSample.FishSampleID, FishSample.LabSampleID, FishSample.FishCode, FishSample.Catch FROM FishSample WHERE (((FishSample.FishSampleID)>70610));

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Wednesday, December 18, 2019
Query: FTP\_Append\_7\_FishLength Page: 13

## <u>SQL</u>

INSERT INTO FishLength (FishLengthID, FishSampleID, Length, AdFinPresent, ReleasedAlive, FieldRace, FinalRace) IN 'U:\NativeFish\FTP Site Delta Smelt Folder\20-mm New\20mm\_New.mdb' SELECT FishLength.FishLengthID, FishLength.FishSampleID, FishLength.Length, FishLength.AdFinPresent, FishLength.ReleasedAlive, FishLength.FieldRace, FishLength.FinalRace FROM FishLength WHERE (((FishLength.FishLengthID)>807474));

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Wednesday, December 18, 2019
Query: FTP\_Append\_8\_MeterCorrections Page: 14

# <u>SQL</u>

INSERT INTO MeterCorrections ( StudyYear, MeterSerial, CalibrationDate, kFactor, Notes ) IN 'U:\NativeFish\FTP Site Delta Smelt Folder\20-mm New\20mm\_New.mdb' SELECT MeterCorrections.StudyYear, MeterCorrections.MeterSerial, MeterCorrections.CalibrationDate, MeterCorrections.kFactor, MeterCorrections.Notes FROM MeterCorrections
WHERE (((MeterCorrections.StudyYear)=2018));

Wednesday, December 18, 2019

Page: 15

### <u>SQL</u>

SELECT [qry\_AMC\_DS CPUE\_04].Year, [qry\_AMC\_DS CPUE\_04].SampleDate, [qry\_AMC\_DS CPUE\_04].qry\_AMC\_DS\_CPUE\_01.Survey, [qry\_AMC\_DS CPUE\_04].qry\_AMC\_DS\_CPUE\_01.Station, [Nt]/[CountOfTowNum] AS CPUE
FROM [qry\_AMC\_DS CPUE\_04] INNER JOIN qry\_MaxofTow ON ([qry\_AMC\_DS
CPUE\_04].qry\_AMC\_DS\_CPUE\_01.Station = qry\_MaxofTow.Station) AND ([qry\_AMC\_DS
CPUE\_04].qry\_AMC\_DS\_CPUE\_01.Survey = qry\_MaxofTow.Survey) AND ([qry\_AMC\_DS
CPUE\_04].SampleDate = qry\_MaxofTow.SampleDate)
GROUP BY [qry\_AMC\_DS CPUE\_04].Year, [qry\_AMC\_DS CPUE\_04].SampleDate, [qry\_AMC\_DS
CPUE\_04].qry\_AMC\_DS\_CPUE\_01.Survey, [qry\_AMC\_DS CPUE\_04].qry\_AMC\_DS\_CPUE\_01.Station, [Nt]/[CountOfTowNum]
HAVING ((([qry\_AMC\_DS CPUE\_04].Year)=2019) AND (([qry\_AMC\_DS
CPUE\_04].qry\_AMC\_DS\_CPUE\_01.Survey)>2 And ([qry\_AMC\_DS
CPUE\_04].qry\_AMC\_DS\_CPUE\_01.Survey)<7));

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Query: qry\_AMC\_DS CPUE\_02 Page: 16

#### <u>SQL</u>

SELECT Year([SampleDate]) AS [Year], Survey.SampleDate, Survey.Survey, Station.Station, Tow.TowNum, Count(FishLength.Length) AS CountOfLength, FishCodes.[Common Name], FishSample.Catch, FishSample.FishCode

FROM (FishCodes INNER JOIN (((((Survey INNER JOIN Station ON Survey.SurveyID = Station.SurveyID) INNER JOIN Tow ON Station.StationID = Tow.StationID) INNER JOIN Gear ON Tow.TowID = Gear.TowID) INNER JOIN LabSample ON Gear.GearID = LabSample.GearID) INNER JOIN FishSample ON LabSample.LabSampleID = FishSample.LabSampleID) ON FishCodes.[Fish Code] = FishSample.FishCode) INNER JOIN FishLength ON FishSample.FishSampleID = FishLength.FishSampleID WHERE (((FishLength) < 60))

GROUP BY Year([SampleDate]), Survey.SampleDate, Survey.Survey, Station.Station, Tow.TowNum, FishCodes.[Common Name], FishSample.Catch, FishSample.FishCode HAVING (((FishSample.FishCode)=3));

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Wednesday, December 18, 2019 Page: 17

#### <u>SQL</u>

SELECT qry\_AMC\_DS\_CPUE\_01.Year, qry\_AMC\_DS\_CPUE\_01.SampleDate, qry\_AMC\_DS\_CPUE\_01.Survey, qry\_AMC\_DS\_CPUE\_01.Station, qry\_AMC\_DS\_CPUE\_01.TowNum, IIf([Common Name] Is Null,"No DS Catch", [Common Name] AS Species, IIf([CountOfLength] Is Null,0,[CountofLength]) AS [DS Catch], qry\_AMC\_DS\_CPUE\_01.Vt AS [Volume of Water] FROM qry\_AMC\_DS\_CPUE\_01 INNER JOIN [qry\_AMC\_DS CPUE\_02] ON (qry\_AMC\_DS\_CPUE\_01.Station = [qry\_AMC\_DS CPUE\_02].Station) AND (qry\_AMC\_DS\_CPUE\_01.Survey = [qry\_AMC\_DS CPUE\_02].Survey) AND (qry\_AMC\_DS\_CPUE\_01.SampleDate = [qry\_AMC\_DS\_CPUE\_02].SampleDate) AND (qry\_AMC\_DS\_CPUE\_01.Year = [qry\_AMC\_DS\_CPUE\_02].Year) GROUP BY qry\_AMC\_DS\_CPUE\_01.Year, qry\_AMC\_DS\_CPUE\_01.SampleDate, qry\_AMC\_DS\_CPUE\_01.Survey, qry\_AMC\_DS\_CPUE\_01.Station, qry\_AMC\_DS\_CPUE\_01.TowNum, IIf([Common Name] Is Null,"No DS Catch",[Common Name]), IIf([CountOfLength] Is Null,0,[CountofLength]), qry\_AMC\_DS\_CPUE\_01.Vt;

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Query: qry\_AMC\_DS CPUE\_04 Page: 18

#### <u>SQL</u>

SELECT [qry\_AMC\_DS CPUE\_03].Year, [qry\_AMC\_DS CPUE\_03].SampleDate, [qry\_AMC\_DS CPUE\_03].qry\_AMC\_DS\_CPUE\_01.Survey, [qry\_AMC\_DS CPUE\_03].qry\_AMC\_DS\_CPUE\_01.Station, Sum([qry\_AMC\_DS CPUE\_03].[DS Catch]) AS [SumOfDS Catch], Sum([DS Catch]/[Volume of Water]\*10000) AS Nt FROM [qry\_AMC\_DS CPUE\_03] GROUP BY [qry\_AMC\_DS CPUE\_03].Year, [qry\_AMC\_DS CPUE\_03].SampleDate, [qry\_AMC\_DS CPUE\_03].qry\_AMC\_DS\_CPUE\_01.Survey, [qry\_AMC\_DS CPUE\_03].qry\_AMC\_DS\_CPUE\_01.Station, [qry\_AMC\_DS CPUE\_03].qry\_AMC\_DS\_CPUE\_01.Station;

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Query: qry\_AMC\_DS\_CPUE\_01 Page: 19

## <u>SQL</u>

SELECT Year([SampleDate]) AS [Year], Survey.SampleDate, Survey.Survey, Station.Station, Tow.TowNum, Gear.GearCode, Gear.MeterSerial, Gear.MeterCheck AS D, 1.51\*0.02687\*[D] AS Vt FROM ((Survey INNER JOIN Station ON Survey.SurveyID = Station.SurveyID) INNER JOIN Tow ON Station.StationID = Tow.StationID) INNER JOIN Gear ON Tow.TowID = Gear.TowID WHERE (((Gear.GearCode)=2)) ORDER BY Survey.SampleDate, Survey.Survey, Station.Station, Tow.TowNum;

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Query: qry\_AvgDSLength Page: 20

#### <u>SQL</u>

SELECT Year([SampleDate]) AS [Year], Survey.Survey, FishSample.FishCode, Avg(FishLength.Length) AS AvgOfLength

FROM (((Survey INNER JOIN Station ON Survey.SurveyID=Station.SurveyID) INNER JOIN Tow ON Station.StationID=Tow.StationID) INNER JOIN Gear ON Tow.TowID=Gear.TowID) INNER JOIN ((FishSample INNER JOIN FishLength ON FishSample.FishSampleID=FishLength.FishSampleID) INNER JOIN LabSample ON FishSample.LabSampleID=LabSample.LabSampleID=DON Gear.GearID=LabSample.GearID WHERE (((FishLength.Length)<60))

GROUP BY Year([SampleDate]), Survey.Survey, FishSample.FishCode HAVING (((FishSample.FishCode)=3))

ORDER BY Year([SampleDate]) DESC, Survey.Survey;

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Wednesday, December 18, 2019 Query: qry\_DateStationTowData

#### <u>SQL</u>

 $SELECT\ Year([SampleDate])\ AS\ [Year],\ Survey. Survey. Survey. SampleDate,\ Station. Station,\ Tow. Tow. Tow. Tow. Tow. Tow. Tow. Duration,\ Gear. Gear. Gear. Meter Serial,\ Tow. CableOut,\ Tow. Duration,\ Gear. Gear. Meter Serial,\ Tow. CableOut,\ T$ Gear.MeterStart, Gear.MeterEnd, Gear.MeterCheck, Station.LatDeg, Station.LatMin, Station.LatSec, Station.LonDeg, Station.LonMin, Station.LonSec, Station.Temp, Station.TopEC, Station.BottomEC, Station.Secchi, Station.Turbidity, Survey.Comments, Station.Comments, Gear.GearID FROM ((Survey INNER JOIN Station ON Survey.SurveyID=Station.SurveyID) INNER JOIN Tow ON Station.StationID=Tow.StationID) INNER JOIN Gear ON Tow.TowID=Gear.TowID;

Page: 21

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Wednesday, December 18, 2019 Query: qry\_LJD\_All Species Catch 01

#### <u>SQL</u>

 $SELECT\ Year([SampleDate])\ AS\ [Year],\ Survey. SampleDate,\ Survey. Survey,\ Station. Station. Tow. Tow. Tow. Tow. Tow. Duration,\ Station. Secchi,\ Station. TopEC,\ Station. BottomEC,\ Station. Temp,$  $Station. Turbidity, \ Tow. Tide, \ Tow. Bottom Depth, \ Tow. Cable Out, \ Gear. Meter Serial, \ Gear. Meter Start, \ Tow. Cable Out, \ Gear. Meter Serial, \ Gear. Meter Start, \ Meter Serial, \ Gear. Meter Start, \ Meter Serial, \ Gear. Met$ Gear.MeterEnd, Gear.MeterCheck, LabSample.LabSampleID, Gear.GearCode FROM (((Survey INNER JOIN Station ON Survey.SurveyID=Station.SurveyID) INNER JOIN Tow ON Station.StationID=Tow.StationID) INNER JOIN Gear ON Tow.TowID=Gear.TowID) INNER JOIN LabSample ON Gear.GearID=LabSample.GearID WHERE (((Gear.GearCode)=2)) ORDER BY Survey.SampleDate, Station.Station, Tow.TowNum;

Page: 22

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Query: qry\_LJD\_All Species Catch 02

Wednesday, December 18, 2019 Page: 23

#### <u>SQL</u>

SELECT [qry\_LJD\_All Species Catch 01].Year, [qry\_LJD\_All Species Catch 01].SampleDate, [qry\_LJD\_All Species Catch 01].Survey, [qry\_LJD\_All Species Catch 01].Station, [qry\_LJD\_All Species Catch 01].TowNum, [qry\_LJD\_All Species Catch 01].TowTime, [qry\_LJD\_All Species Catch 01].Duration, [qry\_LJD\_All Species Catch 01].Secchi, [qry\_LJD\_All Species Catch 01].TopEC, [qry\_LJD\_All Species Catch 01].BottomEC, [qry\_LJD\_All Species Catch 01].Temp, [qry\_LJD\_All Species Catch 01].Turbidity, [qry\_LJD\_All Species Catch 01].Tide, [qry\_LJD\_All Species Catch 01].BottomDepth, [qry\_LJD\_All Species Catch 01].CableOut, ([kfactor]\*[metercheck]\*1.51) AS Volume, [qry\_LJD\_All Species Catch 01].LabSampleID FROM MeterCorrections INNER JOIN [qry\_LJD\_All Species Catch 01] ON (MeterCorrections.StudyYear=[qry\_LJD\_All Species Catch 01].Year) AND (MeterCorrections.MeterSerial=[qry\_LJD\_All Species Catch 01].MeterSerial);

Wednesday, December 18, 2019 Page: 24

#### <u>SQL</u>

TRANSFORM Sum(FishSample.Catch) AS SumOfCatch

SELECT [qry\_LJD\_All Species Catch 02].Year, [qry\_LJD\_All Species Catch 02].SampleDate, [qry\_LJD\_All Species Catch 02].Survey, [qry\_LJD\_All Species Catch 02].Station, [qry\_LJD\_All Species Catch 02].TowNum, [qry\_LJD\_All Species Catch 02].Duration, [qry\_LJD\_All Species Catch 02].Secchi, [qry\_LJD\_All Species Catch 02].TopEC, [qry\_LJD\_All Species Catch 02].BottomEC, [qry\_LJD\_All Species Catch 02].Temp, [qry\_LJD\_All Species Catch 02].Tide, [qry\_LJD\_All Species Catch 02].BottomDepth, [qry\_LJD\_All Species Catch 02].CableOut, [qry\_LJD\_All Species Catch 02].Volume FROM ([qry\_LJD\_All Species Catch 02] LEFT JOIN FishSample ON [qry\_LJD\_All Species Catch 02].LabSampleID = FishSample.LabSampleID) LEFT JOIN FishCodes ON FishSample.FishCode = FishCodes.[Fish Code]

GROUP BY [qry\_LJD\_All Species Catch 02].Year, [qry\_LJD\_All Species Catch 02].SampleDate, [qry\_LJD\_All Species Catch 02].Survey, [qry\_LJD\_All Species Catch 02].Station, [qry\_LJD\_All Species Catch 02].TowNum, [qry\_LJD\_All Species Catch 02].Duration, [qry\_LJD\_All Species Catch 02].Secchi, [qry\_LJD\_All Species Catch 02].TopEC, [qry\_LJD\_All Species Catch 02].BottomEC, [qry\_LJD\_All Species Catch 02].Temp, [qry\_LJD\_All Species Catch 02].Tide, [qry\_LJD\_All Species Catch 02].BottomDepth, [qry\_LJD\_All Species Catch 02].CableOut, [qry\_LJD\_All Species Catch 02].Volume ORDER BY [qry\_LJD\_All Species Catch 02].SampleDate, [qry\_LJD\_All Species Catch 02].Station, [qry\_LJD\_All Species Catch 02].TowNum

PIVOT IIf([Common Name] Is Null,"No Catch",[common name]);

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Query: qry\_LJD\_CPUE (Station)

Wednesday, December 18, 2019 Page: 25

#### <u>SQL</u>

SELECT [qry\_LJD\_CPUE 03].Year, [qry\_LJD\_CPUE 03].[qry\_LJD\_CPUE 01].Survey, [qry\_LJD\_CPUE 03].SampleDate, [qry\_LJD\_CPUE 03].[qry\_LJD\_CPUE 01].Station, [qry\_LJD\_CPUE 03].Species, [qry\_LJD\_CPUE 03].[Species Catch], Avg([qry\_LJD\_CPUE 03].CPUE) AS AvgOfCPUE
FROM [qry\_LJD\_CPUE 03]
GROUP BY [qry\_LJD\_CPUE 03].Year, [qry\_LJD\_CPUE 03].[qry\_LJD\_CPUE 01].Survey, [qry\_LJD\_CPUE 03].SampleDate, [qry\_LJD\_CPUE 03].[qry\_LJD\_CPUE 01].Station, [qry\_LJD\_CPUE 03].Species, [qry\_LJD\_CPUE 03].[Species Catch]
HAVING ((([qry\_LJD\_CPUE 03].[qry\_LJD\_CPUE 01].Survey)=3 Or ([qry\_LJD\_CPUE 03].[qry\_LJD\_CPUE 01].Survey)=5 Or ([qry\_LJD\_CPUE 03].[qry\_LJD\_CPUE 03].[qry\_LJD\_CPUE 01].Survey)=5 Or ([qry\_LJD\_CPUE 01].Survey)=6));

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Query: qry\_LJD\_CPUE 01 Page: 26

## <u>SQL</u>

SELECT Year([SampleDate]) AS [Year], Survey.Survey, Survey.SampleDate, Station.Station, Tow.TowNum, Gear.MeterSerial, Gear.MeterStart, Gear.MeterEnd, Gear.MeterCheck, ([MeterCheck]\*1.51\*0.02687) AS Volume, Gear.GearCode

FROM Survey INNER JOIN ((Station INNER JOIN Tow ON Station.StationID = Tow.StationID) INNER JOIN Gear ON Tow.TowID = Gear.TowID) ON Survey.SurveyID = Station.SurveyID WHERE (((Gear.GearCode)=2));

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Wednesday, December 18, 2019 Query: qry\_LJD\_CPUE 02

#### <u>SQL</u>

SELECT qry\_DateStationTowData.SampleDate, qry\_DateStationTowData.Station, qry\_DateStationTowData.TowNum, FishCodes.[Common Name], Count(FishLength.Length) AS CountOfLength FROM ((qry\_DateStationTowData INNER JOIN (LabSample INNER JOIN FishSample ON LabSample.LabSampleID = FishSample.LabSampleID) ON qry\_DateStationTowData.GearID = LabSample.GearID) INNER JOIN FishCodes ON FishSample.FishCode = FishCodes.[Fish Code]) INNER JOIN FishLength ON FishSample.FishSampleID = FishLength.FishSampleID WHERE (((FishSample.FishCode)=[Fish code?]) AND ((qry\_DateStationTowData.GearCode)=2) AND ((FishLength.Length)<60)) GROUP BY gry\_DateStationTowData.SampleDate, gry\_DateStationTowData.Station, gry\_DateStationTowData.TowNum, FishCodes.[Common Name];

Page: 27

Wednesday, December 18, 2019

Page: 28

#### <u>SQL</u>

SELECT [qry\_LJD\_CPUE 01].Year, [qry\_LJD\_CPUE 01].Survey, [qry\_LJD\_CPUE 01].SampleDate, [qry\_LJD\_CPUE 01].Station, [qry\_LJD\_CPUE 01].TowNum, [qry\_LJD\_CPUE 01].MeterSerial, [qry\_LJD\_CPUE 01].Volume, IIf([common name] Is Null,'no catch',[common name]) AS Species, IIf([countoflength] Is Null,0,[countoflength]) AS [Species Catch], [Species Catch]/[Volume]\*10000 AS CPUE FROM [qry\_LJD\_CPUE 01] LEFT JOIN [qry\_LJD\_CPUE 02] ON ([qry\_LJD\_CPUE 01].TowNum = [qry\_LJD\_CPUE 02].TowNum) AND ([qry\_LJD\_CPUE 01].Station = [qry\_LJD\_CPUE 02].Station) AND ([qry\_LJD\_CPUE 01].SampleDate = [qry\_LJD\_CPUE 02].SampleDate)
WHERE ((([qry\_LJD\_CPUE 01].Year)=2016) AND (([qry\_LJD\_CPUE 01].Survey)=3))
ORDER BY [qry\_LJD\_CPUE 01].Station, [qry\_LJD\_CPUE 01].TowNum;

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Wednesday, December 18, 2019 Query: qry\_LJD\_DS Lengths for Lara

#### <u>SQL</u>

SELECT Survey.SampleDate, Survey.Survey, Station.Station, Tow.TowNum, Tow.TowTime, FishCodes.[Common Name], FishSample.Catch, FishLength.Length FROM ((((((Survey INNER JOIN Station ON Survey.SurveyID = Station.SurveyID) INNER JOIN Tow ON Station.StationID = Tow.StationID) INNER JOIN Gear ON Tow.TowID = Gear.TowID) INNER JOIN LabSample ON Gear.GearID = LabSample.GearID) INNER JOIN FishSample ON LabSample.LabSampleID = FishSample.LabSampleID) INNER JOIN FishLength ON FishSample.FishSampleID = FishLength.FishSampleID) INNER JOIN FishCodes ON FishSample.FishCode = FishCodes.[Fish Code] WHERE (((FishSample.FishCode)=3));

Page: 29

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Wednesday, December 18, 2019
Query: qry\_LJD\_Expanded Lengths 02 Page: 30

#### <u>SQL</u>

SELECT Year([SampleDate]) AS [Year], Survey.Survey, Survey.SampleDate, Station.Station, Tow.TowNum, FishSample.FishCode, FishLength.Length, Count(FishLength.Length) AS LengthCount
FROM (((((Survey INNER JOIN Station ON Survey.SurveyID = Station.SurveyID) INNER JOIN Tow ON
Station.StationID = Tow.StationID) INNER JOIN Gear ON Tow.TowID = Gear.TowID) INNER JOIN LabSample
ON Gear.GearID = LabSample.GearID) INNER JOIN FishSample ON LabSample.LabSampleID =
FishSample.LabSampleID) INNER JOIN FishLength ON FishSample.FishSampleID = FishLength.FishSampleID
GROUP BY Year([SampleDate]), Survey.Survey, Survey.SampleDate, Station.Station, Tow.TowNum,
FishSample.FishCode, FishLength.Length, Gear.GearCode
HAVING (((FishSample.FishCode)=2) AND ((Gear.GearCode)=2))
ORDER BY Year([SampleDate]), Survey.SampleDate, Station.Station, Tow.TowNum, FishLength.Length;

## <u>SQL</u>

SELECT [qry\_LJD\_ExpandedLengths 01].Year, [qry\_LJD\_ExpandedLengths 01].Survey, [qry\_LJD\_ExpandedLengths 01].SampleDate, [qry\_LJD\_ExpandedLengths 01].Station, [qry\_LJD\_ExpandedLengths 01].TowNum, [qry\_LJD\_ExpandedLengths 01].FishCode, [qry\_LJD\_ExpandedLengths 01].Catch, [qry\_LJD\_Expanded Lengths 02].Length, [qry\_LJD\_Expanded Lengths 02].LengthCount, [qry\_LJD\_ExpandedLengths 01].[Expansion Factor], ([Lengthcount]\*[Expansion Factor]) AS [Expanded#ofLengths]
FROM [qry\_LJD\_ExpandedLengths 01] INNER JOIN [qry\_LJD\_Expanded Lengths 02] ON ([qry\_LJD\_ExpandedLengths 01].TowNum = [qry\_LJD\_Expanded Lengths 02].TowNum) AND ([qry\_LJD\_ExpandedLengths 01].Station = [qry\_LJD\_Expanded Lengths 02].Station) AND ([qry\_LJD\_ExpandedLengths 01].SampleDate = [qry\_LJD\_Expanded Lengths 02].SampleDate)
WHERE ((([qry\_LJD\_ExpandedLengths 01].Year)=2017) AND (([qry\_LJD\_ExpandedLengths 01].Station, [qry\_LJD\_ExpandedLengths 01].Station, [qry\_LJD\_ExpandedLengths 01].TowNum, [qry\_LJD\_ExpandedLengths 02].Length;

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Query: qry\_LJD\_ExpandedLengths 01

Wednesday, December 18, 2019 Page: 32

#### <u>SQL</u>

SELECT Year([SampleDate]) AS [Year], Survey.Survey, Survey.SampleDate, Station.Station, Tow.TowNum, FishSample.FishCode, FishSample.Catch, Count(FishLength.Length) AS CountOfLength, ([catch]/[countoflength]) AS [Expansion Factor]
FROM ((((Survey INNER JOIN Station ON Survey.SurveyID = Station.SurveyID) INNER JOIN Tow ON Station.StationID = Tow.StationID) INNER JOIN (Gear INNER JOIN LabSample ON Gear.GearID = LabSample.GearID) ON Tow.TowID = Gear.TowID) INNER JOIN FishSample ON LabSample.LabSampleID = FishSample.LabSampleID) INNER JOIN FishLength ON FishSampleID = FishLength.FishSampleID GROUP BY Year([SampleDate]), Survey.Survey, Survey.SampleDate, Station.Station, Tow.TowNum,

HAVING (((FishSample.FishCode)=2) AND ((Gear.GearCode)=2));

FishSample.FishCode, FishSample.Catch, Gear.GearCode

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Query: qry\_LJD\_LFS CAtch Page: 33

## <u>SQL</u>

SELECT Survey.SampleDate, Station.Station, Tow.TowNum, FishSample.FishCode, FishSample.Catch FROM (((Survey INNER JOIN (Station INNER JOIN Tow ON Station.StationID = Tow.StationID) ON Survey.SurveyID = Station.SurveyID) INNER JOIN Gear ON Tow.TowID = Gear.TowID) INNER JOIN LabSample ON Gear.GearID = LabSample.GearID) INNER JOIN FishSample ON LabSample.LabSampleID = FishSample.LabSampleID WHERE (((FishSample.FishCode)=2));

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Query: qry\_MaxofTow Page: 34

# <u>SQL</u>

SELECT Year([SampleDate]) AS [Year], Survey.Survey, Survey.SampleDate, Station.Station, Count(Tow.TowNum) AS CountOfTowNum
FROM Survey INNER JOIN (Tow INNER JOIN Station ON Tow.StationID=Station.StationID) ON Survey.SurveyID=Station.SurveyID
GROUP BY Year([SampleDate]), Survey.Survey, Survey.SampleDate, Station.Station;

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Wednesday, December 18, 2019 Query: qry\_MeterAverages Page: 35

# <u>SQL</u>

SELECT Station.Station, Avg(Gear.MeterCheck) AS AvgOfMeterCheck, Count(Station.Station) AS CountOfStation FROM (Station INNER JOIN Tow ON Station.StationID = Tow.StationID) INNER JOIN Gear ON Tow.TowID = Gear.TowID WHERE (((Tow.Duration)=10) AND ((Gear.GearCode)=2))

GROUP BY Station.Station

ORDER BY Station. Station;

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Query: qry\_RemoveLabSampleID\_01 Page: 36

# <u>SQL</u>

SELECT ZooSample.LabSampleID, LabSample.LabSampleID
FROM LabSample RIGHT JOIN ZooSample ON LabSample.LabSampleID = ZooSample.LabSampleID
WHERE (((ZooSample.LabSampleID) Is Not Null) AND ((LabSample.LabSampleID) Is Null));

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Query: qry\_RemoveLabSampleID\_02 Page: 37

# <u>SQL</u>

 ${\tt SELECT~qry\_RemoveLabSampleID\_01.ZooSample.LabSampleID~INTO~LabSampleIDToBeDeleted~FROM~qry\_RemoveLabSampleID\_01;}$ 

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Wednesday, December 18, 2019 Query: qry\_SmeltCatchTable\_01

### <u>SQL</u>

SELECT Year([SampleDate]) AS [Year], Survey.Survey, Survey.SampleDate, Station.Station, FishCodes.[Common Name], FishSample.FishCode, Sum(FishSample.Catch) AS SumOfCatch FROM (((((Survey INNER JOIN Station ON Survey.SurveyID=Station.SurveyID) INNER JOIN Tow ON Station.StationID=Tow.StationID) INNER JOIN Gear ON Tow.TowID=Gear.TowID) INNER JOIN LabSample ON Gear.GearID=LabSample.GearID) INNER JOIN FishSample ON LabSample.LabSampleID=FishSample.LabSampleID) INNER JOIN FishCodes ON FishSample.FishCode=FishCodes.[Fish Code] GROUP BY Year([SampleDate]), Survey.Survey, Survey.SampleDate, Station.Station, FishCodes.[Common Name], FishSample.FishCode HAVING (((FishSample.FishCode)=2 Or (FishSample.FishCode)=3));

Page: 38

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb
Query: qry\_SmeltCatchTable\_DeltaSmelt

Wednesday, December 18, 2019 Page: 39

### <u>SQL</u>

SELECT qry\_SmeltCatchTable\_DS02.Year, qry\_SmeltCatchTable\_DS02.qry\_MaxofTow.Survey, [20mm Station Sort Order Look Up].Station, qry\_SmeltCatchTable\_DS02.Date, IIf([Tows Processed] Is Null,0,[Tows Processed]) AS [# Tows Processed], IIf([tows processed] Is Null,"Not Yet Processed",[species]) AS Species\_, qry\_SmeltCatchTable\_DS02.[Total Catch], qry\_SmeltCatchTable\_DS02.[Min Length], qry\_SmeltCatchTable\_DS02.[Avg Length]
FROM [20mm Station Sort Order Look Up] LEFT JOIN qry\_SmeltCatchTable\_DS02 ON [20mm Station Sort Order Look Up].Station = qry\_SmeltCatchTable\_DS02.qry\_MaxofTow.Station;

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Wednesday, December 18, 2019 Page: 40

## <u>SQL</u>

SELECT qry\_SmeltCatchTable\_01.Year, qry\_SmeltCatchTable\_01.Survey, qry\_SmeltCatchTable\_01.Survey, qry\_SmeltCatchTable\_01.Survey, qry\_SmeltCatchTable\_01.Station, qry\_SmeltCatchTable\_01.[Common Name], qry\_SmeltCatchTable\_01.SumOfCatch, qry\_SmeltCatchTable\_Lengths.MinOfLength, qry\_SmeltCatchTable\_Lengths.AvgOfLength pry\_SmeltCatchTable\_Lengths.AvgOfLength pry\_SmeltCatchTable\_01 INNER JOIN qry\_SmeltCatchTable\_Lengths ON (qry\_SmeltCatchTable\_01.FishCode=qry\_SmeltCatchTable\_Lengths.FishCode) AND (qry\_SmeltCatchTable\_01.Station=qry\_SmeltCatchTable\_Lengths.Station) AND (qry\_SmeltCatchTable\_01.SampleDate=qry\_SmeltCatchTable\_Lengths.SampleDate) WHERE (((qry\_SmeltCatchTable\_Lengths.FishCode)=3));

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Wednesday, December 18, 2019 Page: 41

## <u>SQL</u>

SELECT qry\_MaxofTow.Year, qry\_MaxofTow.Survey, qry\_MaxofTow.Station, qry\_MaxofTow.SampleDate AS [Date], qry\_MaxofTow.CountOfTowNum AS [Tows Processed], IIf([Common Name] Is Null,"No Delta Smelt Catch",[Common Name]) AS Species, IIf([SumOfCatch] Is Null,0,[SumOfCatch]) AS [Total Catch], qry\_SmeltCatchTable\_DS01.MinOfLength AS [Min Length], qry\_SmeltCatchTable\_DS01.MaxOfLength AS [Max Length], qry\_SmeltCatchTable\_DS01.AvgOfLength AS [Avg Length]
FROM qry\_MaxofTow LEFT JOIN qry\_SmeltCatchTable\_DS01 ON (qry\_MaxofTow.SampleDate=qry\_SmeltCatchTable\_DS01.SampleDate) AND (qry\_MaxofTow.Station=qry\_SmeltCatchTable\_DS01.qry\_SmeltCatchTable\_01.Station)
WHERE (((qry\_MaxofTow.Year)=[What Year?]) AND ((qry\_MaxofTow.Survey)=[What Survey?]))
ORDER BY qry\_MaxofTow.Year, qry\_MaxofTow.Survey, qry\_MaxofTow.Station;

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Wednesday, December 18, 2019 Page: 42

### <u>SQL</u>

SELECT Year([SampleDate]) AS [Year], Survey.Survey, Survey.SampleDate, Station.Station, FishSample.FishCode, Min(FishLength) AS MinOfLength, Max(FishLength).Length) AS MaxOfLength, Avg(FishLength).Length) AS AvgOfLength

FROM (((Survey INNER JOIN Station ON Survey.SurveyID=Station.SurveyID) INNER JOIN Tow ON Station.StationID=Tow.StationID) INNER JOIN Gear ON Tow.TowID=Gear.TowID) INNER JOIN ((FishSample INNER JOIN LabSample ON FishSample.LabSampleID=LabSample.LabSampleID) INNER JOIN FishLength ON FishSample.FishSampleID=FishLength.FishSampleID) ON Gear.GearID=LabSample.GearID GROUP BY Year([SampleDate]), Survey.Survey, Survey.SampleDate, Station.Station, FishSample.FishCode HAVING (((FishSample.FishCode)=2) Or (FishSample.FishCode)=3));

Wednesday, December 18, 2019 Page: 43

## <u>SQL</u>

SELECT qry\_SmeltCatchTable\_01.Year, qry\_SmeltCatchTable\_01.Survey, qry\_SmeltCatchTable\_01.Survey, qry\_SmeltCatchTable\_01.Survey, qry\_SmeltCatchTable\_01.Station, qry\_SmeltCatchTable\_01.[Common Name], qry\_SmeltCatchTable\_01.SumOfCatch, qry\_SmeltCatchTable\_Lengths.MinOfLength, qry\_SmeltCatchTable\_Lengths.AvgOfLength pry\_SmeltCatchTable\_Lengths.AvgOfLength pry\_SmeltCatchTable\_01 INNER JOIN qry\_SmeltCatchTable\_Lengths ON (qry\_SmeltCatchTable\_01.SampleDate=qry\_SmeltCatchTable\_Lengths.SampleDate) AND (qry\_SmeltCatchTable\_01.Station=qry\_SmeltCatchTable\_Lengths.Station) AND (qry\_SmeltCatchTable\_01.FishCode=qry\_SmeltCatchTable\_Lengths.FishCode) WHERE (((qry\_SmeltCatchTable\_Lengths.FishCode)=2));

Wednesday, December 18, 2019 Page: 44

### <u>SQL</u>

SELECT qry\_MaxofTow.Year, qry\_MaxofTow.Survey AS Survey1, qry\_MaxofTow.Station AS Station1, qry\_MaxofTow.SampleDate AS [Date], qry\_MaxofTow.CountOfTowNum AS [Tows Processed], IIf([Common Name] Is Null,"No Longfin Smelt Catch",[Common Name]) AS Species, IIf([SumOfCatch] Is Null,0,[SumOfCatch]) AS [Total Catch], qry\_SmeltCatchTable\_LFS01.MinOfLength AS [Min Length], qry\_SmeltCatchTable\_LFS01.MaxOfLength AS [Max Length], qry\_SmeltCatchTable\_LFS01.AvgOfLength AS [Avg Length]

FROM qry\_MaxofTow LEFT JOIN qry\_SmeltCatchTable\_LFS01 ON (qry\_MaxofTow.SampleDate=qry\_SmeltCatchTable\_LFS01.SampleDate) AND (qry\_MaxofTow.Station=qry\_SmeltCatchTable\_LFS01.qry\_SmeltCatchTable\_01.Station) WHERE (((qry\_MaxofTow.Year)=[What Year?]) AND ((qry\_MaxofTow.Survey)=[What Survey?])) ORDER BY qry\_MaxofTow.Year, qry\_MaxofTow.Survey, qry\_MaxofTow.Station;

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Wednesday, December 18, 2019 Page: 45

## <u>SQL</u>

SELECT qry\_SmeltCatchTable\_LFS02.Year, qry\_SmeltCatchTable\_LFS02.Survey1, [20mm Station Sort Order Look Up].Station, qry\_SmeltCatchTable\_LFS02.Date, IIf([Tows Processed] Is Null,0,[Tows Processed]) AS [# Tows Processed], IIf([tows processed] Is Null,"Not Yet Processed",[species]) AS Species\_, qry\_SmeltCatchTable\_LFS02.[Total Catch], qry\_SmeltCatchTable\_LFS02.[Min Length], qry\_SmeltCatchTable\_LFS02.[Avg Length] FROM [20mm Station Sort Order Look Up] LEFT JOIN qry\_SmeltCatchTable\_LFS02 ON [20mm Station Sort Order Look Up].Station = qry\_SmeltCatchTable\_LFS02.Station1;

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Wednesday, December 18, 2019
Query: qry\_TLT\_AnnualZooCatch Page: 46

# <u>SQL</u>

SELECT qry\_TLT\_ZooPP02.Year, Sum(qry\_TLT\_ZooPP02.TotalCount) AS SumOfTotalCount FROM qry\_TLT\_ZooPP02
GROUP BY qry\_TLT\_ZooPP02.Year
ORDER BY qry\_TLT\_ZooPP02.Year;

Wednesday, December 18, 2019 Page: 47

## <u>SQL</u>

SELECT qry\_TLT\_CBVolume\_01.Year, qry\_TLT\_CBVolume\_01.SampleDate, qry\_TLT\_CBVolume\_01.Survey, qry\_TLT\_CBVolume\_01.Station, qry\_TLT\_CBVolume\_01.TowNum, qry\_TLT\_CBVolume\_01.GearCode, qry\_TLT\_CBVolume\_01.Gear, 0.010101\*[kFactor]\*[MeterCheck] AS Volume
FROM qry\_TLT\_CBVolume\_01 INNER JOIN MeterCorrections ON (qry\_TLT\_CBVolume\_01.Year=MeterCorrections.StudyYear) AND (qry\_TLT\_CBVolume\_01.MeterSerial=MeterCorrections.MeterSerial);

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Wednesday, December 18, 2019
Query: qry\_TLT\_CBVolume\_01 Page: 48

## <u>SQL</u>

SELECT Year([SampleDate]) AS [Year], Survey.SampleDate, Survey.Survey, Station.Station, Tow.TowNum, Gear.GearCode, GearCodesLkp.Gear, Gear.MeterSerial, Gear.MeterCheck FROM (((Survey INNER JOIN Station ON Survey.SurveyID=Station.SurveyID) INNER JOIN Tow ON Station.StationID=Tow.StationID) INNER JOIN Gear ON Tow.TowID=Gear.TowID) INNER JOIN GearCodesLkp ON Gear.GearCode=GearCodesLkp.GearCode WHERE (((Gear.GearCode)=1));

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Query: qry\_TLT\_DS CPUE

Wednesday, December 18, 2019 Page: 49

### <u>SQL</u>

SELECT [qry\_TLT\_DS CPUE 04].Year, [qry\_TLT\_DS CPUE 04].[qry\_TLT\_DS CPUE 01].Survey, [qry\_TLT\_DS CPUE 04].SampleDate, [qry\_TLT\_DS CPUE 04].[qry\_TLT\_DS CPUE 01].Station, [Nt]/[CountOfTowNum] AS CPUE

 $\label{local_problem} FROM \ [qry\_TLT\_DS \ CPUE \ 04] \ INNER \ JOIN \ qry\_MaxofTow \ ON \ ([qry\_TLT\_DS \ CPUE \ 04]. SampleDate = qry\_MaxofTow. SampleDate) \ AND \ ([qry\_TLT\_DS \ CPUE \ 04]. [qry\_TLT\_DS \ CPUE \ 01]. Station = qry\_MaxofTow. Station) \\$ 

GROUP BY [qry\_TLT\_DS CPUE 04].Year, [qry\_TLT\_DS CPUE 04].[qry\_TLT\_DS CPUE 01].Survey, [qry\_TLT\_DS CPUE 04].SampleDate, [qry\_TLT\_DS CPUE 04].[qry\_TLT\_DS CPUE 01].Station, [Nt]/[CountOfTowNum];

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Wednesday, December 18, 2019
Query: qry\_TLT\_DS CPUE 01 Page: 50

## <u>SQL</u>

SELECT Survey.SampleDate, Survey.Survey, Station.Station, Tow.TowNum, Gear.GearCode, Gear.MeterSerial, Gear.MeterCheck AS D, 1.51\*0.02687\*[D] AS Vt
FROM ((Survey INNER JOIN Station ON Survey.SurveyID=Station.SurveyID) INNER JOIN Tow ON
Station.StationID=Tow.StationID) INNER JOIN Gear ON Tow.TowID=Gear.TowID
WHERE (((Gear.GearCode)=2))
ORDER BY Survey.SampleDate, Survey.Survey, Station.Station, Tow.TowNum;

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HAVING (((FishSample.FishCode)=3));

Wednesday, December 18, 2019 Page: 51

<u>SQL</u>

SELECT Survey.SampleDate, Station.Station, Tow.TowNum, Count(FishLength.Length) AS CountOfLength, FishCodes.[Common Name], FishSample.Catch, FishSample.FishCode
FROM ((((((Survey INNER JOIN Station ON Survey.SurveyID=Station.SurveyID) INNER JOIN Tow ON
Station.StationID=Tow.StationID) INNER JOIN Gear ON Tow.TowID=Gear.TowID) INNER JOIN LabSample
ON Gear.GearID=LabSample.GearID) INNER JOIN FishSample ON
LabSample.LabSampleID=FishSample.LabSampleID) INNER JOIN FishCodes ON
FishSample.FishCode=FishCodes.[Fish Code]) INNER JOIN FishLength ON
FishSample.FishSampleID=FishLength.FishSampleID
WHERE (((FishLength.Length) < 60))
GROUP BY Survey.SampleDate, Station.Station, Tow.TowNum, FishCodes.[Common Name], FishSample.Catch, FishSample.FishCode

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Wednesday, December 18, 2019 Page: 52

## <u>SQL</u>

SELECT [qry\_TLT\_DS CPUE 01].SampleDate, [qry\_TLT\_DS CPUE 01].Survey, [qry\_TLT\_DS CPUE 01].Station, [qry\_TLT\_DS CPUE 01].TowNum, IIf([Common Name] Is Null,"No DS Catch",[Common Name]) AS Species, IIf([CountOfLength] Is Null,0,[CountofLength]) AS [DS Catch], [qry\_TLT\_DS CPUE 01].Vt AS [Volume of Water]

FROM [qry\_TLT\_DS CPUE 01] LEFT JOIN [qry\_TLT\_DS CPUE 02] ON ([qry\_TLT\_DS CPUE 01].SampleDate=[qry\_TLT\_DS CPUE 02].SampleDate) AND ([qry\_TLT\_DS CPUE 01].Station=[qry\_TLT\_DS CPUE 02].Station) AND ([qry\_TLT\_DS CPUE 01].TowNum=[qry\_TLT\_DS CPUE 02].TowNum) GROUP BY [qry\_TLT\_DS CPUE 01].SampleDate, [qry\_TLT\_DS CPUE 01].Survey, [qry\_TLT\_DS CPUE 01].Station, [qry\_TLT\_DS CPUE 01].TowNum, IIf([Common Name] Is Null,"No DS Catch",[Common Name]), IIf([CountOfLength] Is Null,0,[CountofLength]), [qry\_TLT\_DS CPUE 01].Vt;

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Query: qry\_TLT\_DS CPUE 04 Page: 53

### <u>SQL</u>

SELECT Year([SampleDate]) AS [Year], [qry\_TLT\_DS CPUE 03].[qry\_TLT\_DS CPUE 01].Survey, [qry\_TLT\_DS CPUE 03].SampleDate, [qry\_TLT\_DS CPUE 03].[qry\_TLT\_DS CPUE 01].Station, Sum([qry\_TLT\_DS CPUE 03].[DS Catch]) AS [SumOfDS Catch], Sum([DS Catch]/[Volume of Water]\*10000) AS Nt FROM [qry\_TLT\_DS CPUE 03]
GROUP BY Year([SampleDate]), [qry\_TLT\_DS CPUE 03].[qry\_TLT\_DS CPUE 01].Survey, [qry\_TLT\_DS CPUE 03].SampleDate, [qry\_TLT\_DS CPUE 03].[qry\_TLT\_DS CPUE 01].Station;

### <u>SQL</u>

SELECT Year(qry\_TLT\_ExpandedLengths02.SampleDate) AS [Year],
qry\_TLT\_ExpandedLengths02.SampleDate, qry\_TLT\_ExpandedLengths02.Survey,
qry\_TLT\_ExpandedLengths02.Station, qry\_TLT\_ExpandedLengths02.TowNum,
qry\_TLT\_ExpandedLengths02.FishCode, qry\_TLT\_ExpandedLengths02.Length, Max([CountOfLength]\*[Length
Count Factor]) AS [Expanded Length Catch], Max([CountOfLength]\*1) AS [Unexpanded Length Catch]
FROM qry\_TLT\_ExpandedLengths01 INNER JOIN qry\_TLT\_ExpandedLengths02 ON
(qry\_TLT\_ExpandedLengths01.TowNum = qry\_TLT\_ExpandedLengths02.TowNum) AND
(qry\_TLT\_ExpandedLengths01.Station = qry\_TLT\_ExpandedLengths02.Station) AND
(qry\_TLT\_ExpandedLengths01.SampleDate = qry\_TLT\_ExpandedLengths02.SampleDate)
GROUP BY Year(qry\_TLT\_ExpandedLengths02.SampleDate), qry\_TLT\_ExpandedLengths02.SampleDate,
qry\_TLT\_ExpandedLengths02.Survey, qry\_TLT\_ExpandedLengths02.FishCode,
qry\_TLT\_ExpandedLengths02.Length;

#### Page: 55

### <u>SQL</u>

SELECT Year([qry\_TLT\_ExpandedLengths\_AllSp\_02].[SampleDate]) AS [Year], qry\_TLT\_ExpandedLengths\_AllSp\_02.SampleDate, qry\_TLT\_ExpandedLengths\_AllSp\_02.Survey, qry\_TLT\_ExpandedLengths\_AllSp\_02.Station, qry\_TLT\_ExpandedLengths\_AllSp\_02.TowNum, qry\_TLT\_ExpandedLengths\_AllSp\_02.FishCode, qry\_TLT\_ExpandedLengths\_AllSp\_02.Length, Max([CountOfLength]\*[Length Count Factor]) AS [Expanded Length Catch], Max([CountOfLength]\*1) AS [Unexpanded Length Catch]
FROM qry\_TLT\_ExpandedLengths\_AllSp\_01 INNER JOIN qry\_TLT\_ExpandedLengths\_AllSp\_02 ON (qry\_TLT\_ExpandedLengths\_AllSp\_02.FishCode = qry\_TLT\_ExpandedLengths\_AllSp\_01.FishCode) AND (qry\_TLT\_ExpandedLengths\_AllSp\_02.TowNum = qry\_TLT\_ExpandedLengths\_AllSp\_01.TowNum) AND (qry\_TLT\_ExpandedLengths\_AllSp\_02.Station = qry\_TLT\_ExpandedLengths\_AllSp\_01.Station) AND (qry\_TLT\_ExpandedLengths\_AllSp\_01.SampleDate = qry\_TLT\_ExpandedLengths\_AllSp\_02.SampleDate) GROUP BY Year([qry\_TLT\_ExpandedLengths\_AllSp\_02].[SampleDate]), qry\_TLT\_ExpandedLengths\_AllSp\_02.SampleDate, qry\_TLT\_ExpandedLengths\_AllSp\_02.Survey, qry\_TLT\_ExpandedLengths\_AllSp\_02.Station, qry\_TLT\_ExpandedLengths\_AllSp\_02.TowNum, qry\_TLT\_ExpandedLengths\_AllSp\_02.FishCode, qry\_TLT\_ExpandedLengths\_AllSp\_02.Length;

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Wednesday, December 18, 2019
Query: qry\_TLT\_ExpandedLengths\_AllSp\_01 Page: 56

### <u>SQL</u>

SELECT Survey.SampleDate, Station.Station, Tow.TowNum, FishSample.FishCode, Count(FishLength.Length)
AS [Length Count], FishSample.Catch, [Catch]/[Length Count] AS [Length Count Factor], [Length Count
Factor]\*[Length Count] AS [Expanded Count]
FROM (((((Survey INNER JOIN Station ON Survey.SurveyID = Station.SurveyID) INNER JOIN Tow ON
Station.StationID = Tow.StationID) INNER JOIN Gear ON Tow.TowID = Gear.TowID) INNER JOIN LabSample
ON Gear.GearID = LabSample.GearID) INNER JOIN FishSample ON LabSample.LabSampleID =
FishSample.LabSampleID) INNER JOIN FishLength ON FishSample.FishSampleID = FishLength.FishSampleID
GROUP BY Survey.SampleDate, Station.Station, Tow.TowNum, FishSample.FishCode, FishSample.Catch;

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Wednesday, December 18, 2019
Query: qry\_TLT\_ExpandedLengths\_AllSp\_02 Page: 57

### <u>SQL</u>

SELECT Survey.SampleDate, Survey.Survey, Station.Station, Tow.TowNum, FishSample.FishCode, FishLength.Length, Count(FishLength.Length) AS CountOfLength
FROM (((((Survey INNER JOIN Station ON Survey.SurveyID = Station.SurveyID) INNER JOIN Tow ON
Station.StationID = Tow.StationID) INNER JOIN Gear ON Tow.TowID = Gear.TowID) INNER JOIN LabSample
ON Gear.GearID = LabSample.GearID) INNER JOIN FishSample ON LabSample.LabSampleID =
FishSample.LabSampleID) INNER JOIN FishLength ON FishSample.FishSampleID = FishLength.FishSampleID
GROUP BY Survey.SampleDate, Survey.Survey, Station.Station, Tow.TowNum, FishSample.FishCode,
FishLength.Length;

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Query: qry\_TLT\_ExpandedLengths01

Wednesday, December 18, 2019 Page: 58

### <u>SQL</u>

SELECT Survey.SampleDate, Station.Station, Tow.TowNum, FishSample.FishCode, Count(FishLength.Length)
AS [Length Count], FishSample.Catch, [Catch]/[Length Count] AS [Length Count Factor], [Length Count
Factor]\*[Length Count] AS [Expanded Count]
FROM (((((Survey INNER JOIN Station ON Survey.SurveyID = Station.SurveyID) INNER JOIN Tow ON
Station.StationID = Tow.StationID) INNER JOIN Gear ON Tow.TowID = Gear.TowID) INNER JOIN LabSample
ON Gear.GearID = LabSample.GearID) INNER JOIN FishSample ON LabSample.LabSampleID =
FishSample.LabSampleID) INNER JOIN FishLength ON FishSample.FishSampleID = FishLength.FishSampleID
GROUP BY Survey.SampleDate, Station.Station, Tow.TowNum, FishSample.FishCode, FishSample.Catch
HAVING (((FishSample.FishCode)=2));

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Wednesday, December 18, 2019
Query: qry\_TLT\_ExpandedLengths02 Page: 59

### <u>SQL</u>

SELECT Survey.SampleDate, Survey.Survey, Station.Station, Tow.TowNum, FishSample.FishCode, FishLength.Length, Count(FishLength.Length) AS CountOfLength
FROM (((((Survey INNER JOIN Station ON Survey.SurveyID = Station.SurveyID) INNER JOIN Tow ON
Station.StationID = Tow.StationID) INNER JOIN Gear ON Tow.TowID = Gear.TowID) INNER JOIN LabSample
ON Gear.GearID = LabSample.GearID) INNER JOIN FishSample ON LabSample.LabSampleID =
FishSample.LabSampleID) INNER JOIN FishLength ON FishSample.FishSampleID = FishLength.FishSampleID
GROUP BY Survey.SampleDate, Survey.Survey, Station.Station, Tow.TowNum, FishSample.FishCode,
FishLength.Length
HAVING (((FishSample.FishCode)=2));

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb
Query: qry\_TLT\_Gonzalo

Wednesday, December 18, 2019 Page: 60

### <u>SQL</u>

SELECT Year([SampleDate]) AS [Year], Survey.SampleDate, Survey.Survey, Station.Station, tbl\_TLT\_Stations.Code, tbl\_TLT\_Stations.Type, Tow.TowNum, Gear.GearCode, LabSample.SampleCode, LabSampleLabSampleType

FROM ((((Survey INNER JOIN Station ON Survey.SurveyID = Station.SurveyID) INNER JOIN Tow ON Station.StationID = Tow.StationID) INNER JOIN Gear ON Tow.TowID = Gear.TowID) INNER JOIN LabSample ON Gear.GearID = LabSample.GearID) INNER JOIN tbl\_TLT\_Stations ON Station.Station = tbl\_TLT\_Stations.Station

WHERE (((Year([SampleDate]))<2018) AND ((Survey.Survey)>9) AND ((tbl\_TLT\_Stations.Code)=1) AND ((Gear.GearCode)=1) AND ((LabSample.SampleCode)=1) AND ((LabSample.LabSampleType)="zoo")) ORDER BY Year([SampleDate]), Survey.Survey, Station.Station, Tow.TowNum;

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Wednesday, December 18, 2019
Query: qry\_TLT\_Index01 Page: 61

# <u>SQL</u>

SELECT [qry\_TLT\_DS CPUE].Year, [qry\_TLT\_DS CPUE].[qry\_TLT\_DS CPUE 01].Survey, [qry\_TLT\_DS CPUE].SampleDate, tbl\_TLT\_IndexStations.Station, [qry\_TLT\_DS CPUE].CPUE, [CPUE]+1 AS [CPUE+1], Log([CPUE]+1)/Log(10) AS [Log10 Trans] FROM [qry\_TLT\_DS CPUE] INNER JOIN tbl\_TLT\_IndexStations ON [qry\_TLT\_DS CPUE].[qry\_TLT\_DS CPUE 01].Station = tbl\_TLT\_IndexStations.Station;

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Wednesday, December 18, 2019 Query: qry\_TLT\_Index02

### <u>SQL</u>

 $SELECT\ qry\_TLT\_Index01. [qry\_TLT\_DS\ CPUE\ 01]. Survey, \\ Avg(qry\_TLT\_Index01. [Log10\ Trans])\ AS\ [AvgOfLog10\ Trans], (10^(Avg([Log10\ Trans])))-1\ AS\ Geomean, ]$ qry\_AvgDSLength.AvgOfLength
FROM qry\_TLT\_Index01 INNER JOIN qry\_AvgDSLength ON (qry\_TLT\_Index01.Year = qry\_AvgDSLength.Year) AND (qry\_TLT\_Index01.[qry\_TLT\_DS CPUE 01].Survey = qry\_AvgDSLength.Survey) GROUP BY qry\_TLT\_Index01.Year, qry\_TLT\_Index01.[qry\_TLT\_DS CPUE 01].Survey, qry\_AvgDSLength.AvgOfLength;

Page: 62

Page: 63

### <u>SQL</u>

SELECT FishCodes.[Common Name], Month([SampleDate]) AS [Month],
qry\_TLT\_ExpandedLengths\_AllSp.qry\_TLT\_ExpandedLengths\_AllSp\_02.Survey,
qry\_TLT\_ExpandedLengths\_AllSp.Length, Sum(qry\_TLT\_ExpandedLengths\_AllSp.[Expanded Length Catch])
AS [SumOfExpanded Length Catch]
FROM qry\_TLT\_ExpandedLengths\_AllSp INNER JOIN FishCodes ON
qry\_TLT\_ExpandedLengths\_AllSp.FishCode = FishCodes.[Fish Code]
GROUP BY FishCodes.[Common Name], Month([SampleDate]),
qry\_TLT\_ExpandedLengths\_AllSp.qry\_TLT\_ExpandedLengths\_AllSp\_02.Survey,
qry\_TLT\_ExpandedLengths\_AllSp.Length
ORDER BY FishCodes.[Common Name], Month([SampleDate]),
qry\_TLT\_ExpandedLengths\_AllSp.qry\_TLT\_ExpandedLengths\_AllSp\_02.Survey,
qry\_TLT\_ExpandedLengths\_AllSp.length;

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Query: qry\_TLT\_Lengths01

Wednesday, December 18, 2019 Page: 64

### <u>SQL</u>

SELECT FishSample.FishCode, FishCodes.[Common Name], FishLength.Length
FROM FishCodes INNER JOIN ((((((Survey INNER JOIN Station ON Survey.SurveyID = Station.SurveyID)
INNER JOIN Tow ON Station.StationID = Tow.StationID) INNER JOIN Gear ON Tow.TowID = Gear.TowID)
INNER JOIN LabSample ON Gear.GearID = LabSample.GearID) INNER JOIN FishSample ON
LabSample.LabSampleID = FishSample.LabSampleID) INNER JOIN FishLength ON FishSample.FishSampleID
= FishLength.FishSampleID) ON FishCodes.[Fish Code] = FishSample.FishCode
WHERE (((FishSample.FishCode)=17 Or (FishSample.FishCode)=8 Or (FishSample.FishCode)=40 Or (FishSample.FishCode)=51 Or (FishSample.FishCode)=22 Or (FishSample.FishCode)=10))
ORDER BY FishCodes.[Common Name], FishLength.Length;

 $\begin{tabular}{ll} C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb\\ Query:\qry\_TLT\_LFS\ CPUE\ 02 \end{tabular}$ 

Wednesday, December 18, 2019

Page: 65

## <u>SQL</u>

SELECT qry\_TLT\_ExpandedLengths.SampleDate, qry\_TLT\_ExpandedLengths.qry\_TLT\_ExpandedLengths.17 ExpandedLengths.17 ExpandedLengths.18 [ExpandedLengths.FishCode, Sum(qry\_TLT\_ExpandedLengths.[Expanded Length Catch]) AS [SumOfExpanded Length Catch] FROM qry\_TLT\_ExpandedLengths GROUP BY qry\_TLT\_ExpandedLengths.SampleDate, qry\_TLT\_ExpandedLengths.qry\_TLT\_ExpandedLengths.17 ExpandedLengths.17 Expan

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Query: qry\_TLT\_LFS CPUE 03

Wednesday, December 18, 2019 Page: 66

### <u>SQL</u>

SELECT [qry\_TLT\_DS CPUE 01].SampleDate, [qry\_TLT\_DS CPUE 01].Station, [qry\_TLT\_DS CPUE 01].TowNum, IIf([SumOfExpanded Length Catch] Is Null,0,[SumOfExpanded Length Catch]) AS [LFS Catch], [qry\_TLT\_DS CPUE 01].Vt AS [Volume of Water]
FROM [qry\_TLT\_DS CPUE 01] LEFT JOIN [qry\_TLT\_LFS CPUE 02] ON ([qry\_TLT\_DS CPUE 01].TowNum=[qry\_TLT\_LFS CPUE 02].TowNum) AND ([qry\_TLT\_DS CPUE 01].SampleDate=[qry\_TLT\_LFS CPUE 02].SampleDate) AND ([qry\_TLT\_DS CPUE 01].Station=[qry\_TLT\_LFS CPUE 02].qry\_TLT\_ExpandedLengths02.Station)
GROUP BY [qry\_TLT\_DS CPUE 01].SampleDate, [qry\_TLT\_DS CPUE 01].Station, [qry\_TLT\_DS CPUE 01].TowNum, IIf([SumOfExpanded Length Catch] Is Null,0,[SumOfExpanded Length Catch]), [qry\_TLT\_DS CPUE 01].Vt;

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Wednesday, December 18, 2019
Query: qry\_TLT\_MeterSD Page: 67

# <u>SQL</u>

SELECT Gear.GearCode, Tow.Duration, Avg(Gear.MeterCheck) AS AvgOfMeterCheck, StDev(IIf([MeterCheck] Is Not Null,CStr([MeterCheck]))) AS StDev FROM Tow INNER JOIN Gear ON Tow.TowID=Gear.TowID GROUP BY Gear.GearCode, Tow.Duration HAVING (((Tow.Duration)=2.5 Or (Tow.Duration)=5 Or (Tow.Duration)=10));

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Wednesday, December 18, 2019
Query: qry\_TLT\_StationSD Page: 68

# <u>SQL</u>

SELECT Station.Station, Avg(Station.TopEC) AS AvgOfTopEC, StDev(IIf([TopEC] Is Not Null,CStr([TopEC]))) AS TopECStDev, Avg(Station.BottomEC) AS AvgOfBottomEC, StDev(IIf([BottomEC] Is Not Null,CStr([BottomEC]))) AS BotECStDev, Avg(Station.Secchi) AS AvgOfSecchi, StDev(IIf([Secchi] Is Not Null,CStr([Secchi]))) AS SecchiStDev FROM Station GROUP BY Station.Station;

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb
Query: qry\_TLT\_WS CPUE

Wednesday, December 18, 2019 Page: 69

### <u>SQL</u>

SELECT [qry\_TLT\_WS CPUE 04].Year, [qry\_TLT\_WS CPUE 04].[qry\_TLT\_DS CPUE 01].Survey, [qry\_TLT\_WS CPUE 04].SampleDate, [qry\_TLT\_WS CPUE 04].[qry\_TLT\_DS CPUE 01].Station, [Nt]/[CountOfTowNum] AS CPUE

 $\label{lem:condition} FROM \ [qry\_TLT\_WS\ CPUE\ 04]\ INNER\ JOIN\ qry\_MaxofTow\ ON\ ([qry\_TLT\_WS\ CPUE\ 04]\ .\\ SampleDate = qry\_MaxofTow.SampleDate)\ AND\ ([qry\_TLT\_WS\ CPUE\ 04]\ .\\ [qry\_TLT\_DS\ CPUE\ 01]\ .\\ Station = qry\_MaxofTow.Station)$ 

GROUP BY [qry\_TLT\_WS CPUE 04].Year, [qry\_TLT\_WS CPUE 04].[qry\_TLT\_DS CPUE 01].Survey, [qry\_TLT\_WS CPUE 04].SampleDate, [qry\_TLT\_WS CPUE 04].[qry\_TLT\_DS CPUE 01].Station, [Nt]/[CountOfTowNum];

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Wednesday, December 18, 2019
Query: qry\_TLT\_WS CPUE 02 Page: 70

### <u>SQL</u>

SELECT Survey.SampleDate, Station.Station, Tow.TowNum, Count(FishLength.Length) AS CountOfLength, FishCodes.[Common Name], FishSample.Catch, FishSample.FishCode
FROM ((((((Survey INNER JOIN Station ON Survey.SurveyID=Station.SurveyID) INNER JOIN Tow ON Station.StationID=Tow.StationID) INNER JOIN Gear ON Tow.TowID=Gear.TowID) INNER JOIN LabSample ON Gear.GearID=LabSample.GearID) INNER JOIN FishSample ON LabSample.LabSampleID=FishSample.LabSampleID) INNER JOIN FishCodes ON FishSample.FishCode=FishCodes.[Fish Code]) INNER JOIN FishLength ON FishSample.FishSampleID=FishLength.FishSampleID
GROUP BY Survey.SampleDate, Station.Station, Tow.TowNum, FishCodes.[Common Name], FishSample.Catch, FishSample.FishCode
HAVING (((FishSample.FishCode)=22)));

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Query: qry\_TLT\_WS CPUE 03

Wednesday, December 18, 2019 Page: 71

### <u>SQL</u>

SELECT [qry\_TLT\_DS CPUE 01].SampleDate, [qry\_TLT\_DS CPUE 01].Survey, [qry\_TLT\_DS CPUE 01].Station, [qry\_TLT\_DS CPUE 01].TowNum, IIf([Common Name] Is Null,"No WS Catch",[Common Name]) AS Species, IIf([CountOfLength] Is Null,0,[CountofLength]) AS [WS Catch], [qry\_TLT\_DS CPUE 01].Vt AS [Volume of Water]

FROM [qry\_TLT\_DS CPUE 01] LEFT JOIN [qry\_TLT\_WS CPUE 02] ON ([qry\_TLT\_DS CPUE 01].TowNum=[qry\_TLT\_WS CPUE 02].TowNum) AND ([qry\_TLT\_DS CPUE 01].Station=[qry\_TLT\_WS CPUE 02].Station) AND ([qry\_TLT\_DS CPUE 01].SampleDate=[qry\_TLT\_WS CPUE 02].SampleDate) GROUP BY [qry\_TLT\_DS CPUE 01].SampleDate, [qry\_TLT\_DS CPUE 01].Survey, [qry\_TLT\_DS CPUE 01].Station, [qry\_TLT\_DS CPUE 01].TowNum, IIf([Common Name] Is Null,"No WS Catch",[Common Name]), IIf([CountOfLength] Is Null,0,[CountofLength]), [qry\_TLT\_DS CPUE 01].Vt;

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Wednesday, December 18, 2019
Query: qry\_TLT\_WS CPUE 04 Page: 72

03].SampleDate, [qry\_TLT\_WS CPUE 03].[qry\_TLT\_DS CPUE 01].Station;

### <u>SQL</u>

SELECT Year([SampleDate]) AS [Year], [qry\_TLT\_WS CPUE 03].[qry\_TLT\_DS CPUE 01].Survey, [qry\_TLT\_WS CPUE 03].SampleDate, [qry\_TLT\_WS CPUE 03].[qry\_TLT\_DS CPUE 01].Station, Sum([qry\_TLT\_WS CPUE 03].[WS Catch]) AS [SumOfWS Catch], Sum([WS Catch]/[Volume of Water]\*10000) AS Nt FROM [qry\_TLT\_WS CPUE 03] GROUP BY Year([SampleDate]), [qry\_TLT\_WS CPUE 03].[qry\_TLT\_DS CPUE 01].Survey, [qry\_TLT\_WS CPUE 03].[qry\_TLT\_DS CPUE 03].[

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Wednesday, December 18, 2019
Query: qry\_TLT\_ZooBPUE Page: 73

## <u>SQL</u>

SELECT qry\_TLT\_ZoopCPUE\_04.Year, qry\_TLT\_ZoopCPUE\_04.SampleDate, qry\_TLT\_ZoopCPUE\_04.qry\_TLT\_ZoopCPUE\_01.Survey, qry\_TLT\_ZoopCPUE\_04.qry\_TLT\_ZoopCPUE\_01.Station, qry\_TLT\_ZoopCPUE\_04.TowNum, qry\_TLT\_ZoopCPUE\_04.Volume, qry\_TLT\_ZoopCPUE\_04.Dilution, qry\_TLT\_ZoopCPUE\_04.[Zoo Code], qry\_TLT\_ZoopCPUE\_04.[Common Name], [CPUE]\*[CarbonWeight] AS BPUE FROM qry\_TLT\_ZoopCPUE\_04 INNER JOIN ZooCarbonWeightsLookUp ON qry\_TLT\_ZoopCPUE\_04.[Zoo Code] = ZooCarbonWeightsLookUp.ZooCode;

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Query: qry\_TLT\_ZooCheck

Wednesday, December 18, 2019 Page: 74

### <u>SQL</u>

SELECT Year([SampleDate]) AS [Year], Survey. Station. Station, Gear.GearCode, LabSample.LabSampleID, ZooSample.CellsProcessed, Max(ZooCount.CellNumber) AS MaxOfCellNumber

FROM (((((Survey LEFT JOIN Station ON Survey.SurveyID = Station.SurveyID) LEFT JOIN Tow ON Station.StationID = Tow.StationID) LEFT JOIN Gear ON Tow.TowID = Gear.TowID) LEFT JOIN LabSample ON Gear.GearID = LabSample.GearID) LEFT JOIN ZooSample ON LabSample.LabSampleID = ZooSample.LabSampleID) LEFT JOIN ZooCount ON ZooSample.LabSampleID = ZooCount.LabSampleID GROUP BY Year([SampleDate]), Survey.Survey, Station.Station, Gear.GearCode, LabSample.LabSampleType, LabSample.LabSampleID, ZooSample.CellsProcessed HAVING (((Year([SampleDate]))=2016) AND ((Gear.GearCode)=1)) ORDER BY LabSample.LabSampleID;

C:\Users\jdubois\Desktop\20mm\_New\_Standalone\_WithQueries.accdb Query: qry\_TLT\_ZoopCPUE\_01

Wednesday, December 18, 2019 Page: 75

### <u>SQL</u>

SELECT Year([SampleDate]) AS [Year], Survey.SampleDate, Survey.Survey, Station.Station, Tow.TowNum, Gear.GearCode, LabSample.SampleCode, LabSample.LabSampleType, ZooSample.Dilution, ZooSample.CellsProcessed, ZooCount.CellNumber, ZooCodes.[Zoo Code], ZooCodes.[Common Name], ZooCount.ZooCount, Station.Temp, Station.TopEC, Station.BottomEC, Station.Secchi, Station.Turbidity, Tow.TowTime, Tow.Tide, Tow.BottomDepth, Tow.Duration, Gear.MeterCheck
FROM (((((Survey LEFT JOIN Station ON Survey.SurveyID = Station.SurveyID) LEFT JOIN Tow ON Station.StationID = Tow.StationID) LEFT JOIN Gear ON Tow.TowID = Gear.TowID) LEFT JOIN LabSample ON Gear.GearID = LabSample.GearID) LEFT JOIN ZooSample ON LabSample.LabSampleID = ZooSample.LabSampleID) LEFT JOIN (ZooCount LEFT JOIN ZooCodes ON ZooCount.ZooCode = ZooCodes.[Zoo Code]) ON ZooSample.LabSampleID = ZooCount.LabSampleID
WHERE (((Gear.GearCode)=1) AND ((LabSample.SampleCode)=1) AND ((LabSample.LabSampleType)="zoo"));

## <u>SQL</u>

SELECT qry\_TLT\_ZoopCPUE\_01.Year, qry\_TLT\_ZoopCPUE\_01.SampleDate, qry\_TLT\_ZoopCPUE\_01.Survey, qry\_TLT\_ZoopCPUE\_01.Station, qry\_TLT\_ZoopCPUE\_01.TowNum, qry\_TLT\_ZoopCPUE\_01.GearCode, qry\_TLT\_ZoopCPUE\_01.SampleCode, qry\_TLT\_ZoopCPUE\_01.LabSampleType, qry\_TLT\_ZoopCPUE\_01.Dilution, qry\_TLT\_ZOOPCPUE\_01.LabSampleType, qry\_TLT\_ZoopCPUE\_01.Dilution, qry\_TLT\_ZOOPCPUE\_01.CellsProcessed, qry\_TLT\_ZoopCPUE\_01.CellNumber, qry\_TLT\_ZoopCPUE\_01.[Zoo Code], qry\_TLT\_ZoopCPUE\_01.[Common Name], ([ZooCount]\*[Dilution])/[Volume] AS CellCPUE, qry\_TLT\_ZoopCPUE\_01.Temp, qry\_TLT\_ZoopCPUE\_01.TopEC, qry\_TLT\_ZoopCPUE\_01.BottomEC, qry\_TLT\_ZoopCPUE\_01.Secchi, qry\_TLT\_ZoopCPUE\_01.Turbidity, qry\_TLT\_ZoopCPUE\_01.TowTime, qry\_TLT\_ZoopCPUE\_01.Tide, qry\_TLT\_ZoopCPUE\_01.BottomDepth, qry\_TLT\_ZoopCPUE\_01.Duration, qry\_TLT\_ZoopCPUE\_01.MeterCheck FROM qry\_TLT\_ZoopCPUE\_01 LEFT JOIN qry\_TLT\_ZOOPCPUE\_01.Survey = qry\_TLT\_ZOOPCPUE\_01.SampleDate = qry\_TLT\_CBVolume.SampleDate) AND (qry\_TLT\_ZoopCPUE\_01.Survey) AND (qry\_TLT\_ZoopCPUE\_01.TowNum = qry\_TLT\_CBVolume.TowNum) AND (qry\_TLT\_ZoopCPUE\_01.Station = qry\_TLT\_CBVolume.Station);

Page: 77

### <u>SQL</u>

SELECT qry\_TLT\_ZoopCPUE\_02.Year, qry\_TLT\_ZoopCPUE\_02.SampleDate, qry\_TLT\_ZoopCPUE\_02.qry\_TLT\_ZoopCPUE\_01.Survey, qry\_TLT\_ZoopCPUE\_02.qry\_TLT\_ZoopCPUE\_01.Station, qry\_TLT\_ZoopCPUE\_02.TowNum, qry\_TLT\_ZoopCPUE\_02.Dilution, qry\_TLT\_ZoopCPUE\_02.Volume, qry\_TLT\_ZoopCPUE\_02.CellsProcessed, qry\_TLT\_ZoopCPUE\_02.[Zoo Code], qry\_TLT\_ZoopCPUE\_02.[Common Name], Sum(qry\_TLT\_ZoopCPUE\_02.CellCPUE) AS SumOfCellCPUE, qry\_TLT\_ZoopCPUE\_02.Temp, qry\_TLT\_ZoopCPUE\_02.TopEC, qry\_TLT\_ZoopCPUE\_02.BottomEC, qry\_TLT\_ZoopCPUE\_02.Secchi, qry\_TLT\_ZoopCPUE\_02.Turbidity, qry\_TLT\_ZoopCPUE\_02.TowTime, qry\_TLT\_ZoopCPUE\_02.Tide, qry\_TLT\_ZoopCPUE\_02.BottomDepth, qry\_TLT\_ZoopCPUE\_02.Duration, qry\_TLT\_ZoopCPUE\_02.MeterCheck FROM gry\_TLT\_ZoopCPUE\_02 GROUP BY qry\_TLT\_ZoopCPUE\_02.Year, qry\_TLT\_ZoopCPUE\_02.SampleDate, qry\_TLT\_ZoopCPUE\_02.qry\_TLT\_ZoopCPUE\_01.Survey, gry\_TLT\_ZoopCPUE\_02.gry\_TLT\_ZoopCPUE\_01.Station, gry\_TLT\_ZoopCPUE\_02.TowNum, qry\_TLT\_ZoopCPUE\_02.Dilution, qry\_TLT\_ZoopCPUE\_02.Volume, qry\_TLT\_ZoopCPUE\_02.CellsProcessed, qry\_TLT\_ZoopCPUE\_02.[Zoo Code], qry\_TLT\_ZoopCPUE\_02.[Common Name], qry\_TLT\_ZoopCPUE\_02.Temp, qry\_TLT\_ZoopCPUE\_02.TopEC, qry\_TLT\_ZoopCPUE\_02.BottomEC, qry\_TLT\_ZoopCPUE\_02.Secchi, qry\_TLT\_ZoopCPUE\_02.Turbidity, qry\_TLT\_ZoopCPUE\_02.TowTime, qry\_TLT\_ZoopCPUE\_02.Tide, qry\_TLT\_ZoopCPUE\_02.BottomDepth, qry\_TLT\_ZoopCPUE\_02.Duration, qry\_TLT\_ZoopCPUE\_02.MeterCheck;

Wednesday, December 18, 2019 Page: 78

<u>SQL</u>

SELECT qry\_TLT\_ZoopCPUE\_03.Year, qry\_TLT\_ZoopCPUE\_03.SampleDate, qry\_TLT\_ZoopCPUE\_03.qry\_TLT\_ZoopCPUE\_01.Survey, qry\_TLT\_ZoopCPUE\_03.qry\_TLT\_ZoopCPUE\_01.Station, qry\_TLT\_ZoopCPUE\_03.TowNum, qry\_TLT\_ZoopCPUE\_03.Volume, qry\_TLT\_ZoopCPUE\_03.Dilution, qry\_TLT\_ZoopCPUE\_03.[Zoo Code], qry\_TLT\_ZoopCPUE\_03.[Common Name], [SumOfCellCPUE]/[CellsProcessed] AS CPUE, qry\_TLT\_ZoopCPUE\_03.Temp, qry\_TLT\_ZoopCPUE\_03.TopEC, qry\_TLT\_ZoopCPUE\_03.BottomEC, qry\_TLT\_ZoopCPUE\_03.Secchi, qry\_TLT\_ZoopCPUE\_03.Turbidity, qry\_TLT\_ZoopCPUE\_03.TowTime, qry\_TLT\_ZoopCPUE\_03.Tide, qry\_TLT\_ZoopCPUE\_03.BottomDepth, qry\_TLT\_ZoopCPUE\_03.Duration, qry\_TLT\_ZoopCPUE\_03.MeterCheck
FROM qry\_TLT\_ZoopCPUE\_03
WHERE (((qry\_TLT\_ZoopCPUE\_03.Dilution)>0)));

Wednesday, December 18, 2019 Page: 79

### <u>SQL</u>

TRANSFORM Sum(gry\_TLT\_ZoopCPUE\_04.CPUE) AS SumOfCPUE SELECT qry\_TLT\_ZoopCPUE\_04.SampleDate, qry\_TLT\_ZoopCPUE\_04.qry\_TLT\_ZoopCPUE\_01.Survey AS Survey, qry\_TLT\_ZoopCPUE\_04.qry\_TLT\_ZoopCPUE\_01.Station AS Station, qry\_TLT\_ZoopCPUE\_04.TowNum, qry\_TLT\_ZoopCPUE\_04.TowTime, qry\_TLT\_ZoopCPUE\_04.Temp, qry\_TLT\_ZoopCPUE\_04.TopEC, qry\_TLT\_ZoopCPUE\_04.BottomEC, qry\_TLT\_ZoopCPUE\_04.Secchi, qry\_TLT\_ZoopCPUE\_04.Turbidity, qry\_TLT\_ZoopCPUE\_04.Tide, qry\_TLT\_ZoopCPUE\_04.BottomDepth, qry\_TLT\_ZoopCPUE\_04.Duration, qry\_TLT\_ZoopCPUE\_04.MeterCheck, qry\_TLT\_ZoopCPUE\_04.Volume, qry\_TLT\_ZoopCPUE\_04.Dilution FROM qry\_TLT\_ZoopCPUE\_04 WHERE (((qry\_TLT\_ZoopCPUE\_04.SampleDate)<#1/1/2018#)) GROUP BY gry\_TLT\_ZoopCPUE\_04.SampleDate, gry\_TLT\_ZoopCPUE\_04.gry\_TLT\_ZoopCPUE\_01.Survey, qry\_TLT\_ZoopCPUE\_04.qry\_TLT\_ZoopCPUE\_01.Station, qry\_TLT\_ZoopCPUE\_04.TowNum, qry\_TLT\_ZoopCPUE\_04.TowTime, qry\_TLT\_ZoopCPUE\_04.Temp, qry\_TLT\_ZoopCPUE\_04.TopEC, qry\_TLT\_ZoopCPUE\_04.BottomEC, qry\_TLT\_ZoopCPUE\_04.Secchi, qry\_TLT\_ZoopCPUE\_04.Turbidity, qry\_TLT\_ZoopCPUE\_04.Tide, qry\_TLT\_ZoopCPUE\_04.BottomDepth, qry\_TLT\_ZoopCPUE\_04.Duration, qry\_TLT\_ZoopCPUE\_04.MeterCheck, qry\_TLT\_ZoopCPUE\_04.Volume, qry\_TLT\_ZoopCPUE\_04.Dilution PIVOT qry\_TLT\_ZoopCPUE\_04.[Common Name];