

Teton Stoneflies 2016

WYNDD-Tronstad 307-766-3115

Date: 26 July 2016

Time: Arrived: 7pm Departed: 9:00 Collectors: DF, SH, LZ

Stream: Upper Paintbrush Rock Creek Location Description: Paintbrush Canyon

UTMs: N 0516559 W - 4848030 Datum: _____ on Deb's GPS

Elevation: 2695 m a.s.l. Site name on GPS: PBR601

Water quality (Recorded with a YSI Pro Plus Multitprobe) Deb's Proplus

Parameter	Value 7:30	Value 1:30pm	Units
Water temperature	6.5	5.6	°C
Barometric pressure	547.6		mmHg
DO			% saturation
DO			mg/L
Specific conductivity (SPC)	34.6	37.7	µS/cm
Conductivity	22.3	23.7	µS/cm
pH			
ORP			mV
Air temp	NO ₃ - N	0.08	0.09 mg/L

Last calibrated: 7/25 DO: —

Photos taken: Site Temp Probe

Weather: Sunny, warm

Substrate type: Boulder, cobble, gravel

Number of Surbers collected: 6

Aspect: —

Slope: —

Biofilm rank: Little Medium Green

slipping edge

Pfankuck Index

	Excellent	Good	Fair	Poor	Score
Angularity	Lots of edges (1)	Some edges, some round (2)	Rounded edges (3)	All round (4)	1
Brightness (Dull = biofilm)	Most surfaces dull (1)	Mostly dull, <35% bright (2)	50/50 dull & bright (3)	Mostly bright, >65% (4)	1
Scour	<5% evidence of scour (6)	5-30% of bed scoured (12)	30-50% of bed scoured (18)	>50% of bed scoured (24)	12
Consolidation of substrate	Lots of sizes, tightly packed (2)	Moderately packed, some size overlap (4)	Mostly loose, not much overlap (6)	Totally loose, easily moved (8)	2
Aquatic Veg	Abundant veg, moss in swift water (1)	Common veg or algae, lots in pools (3)	Spotty, in backwater or season algae (3)	Perennial types, very scarce or absent (4)	1

Temp logger number: 10972587 Coordinates: UTMs: N _____ W - _____

Placed at head on right

Stream width (m): on back Depth (cm): _____

Suspended Solids:

Filter number	1	2	3
Volume filtered (mL)	200	200	200

Notes (continue on back):

Filling out datasheet from memory on some points
Zednia here!

stream profile
left

Distance cm	0	30	60	90	120	150	180	210	240	270	300	330	360
Depth cm	2	5	0	3	4	3	5	0	1	7	4	11	0

Teton Stoneflies 2016
WYNDD-Tronstad 307-766-3115

Date: 27 July 2016

Time: Arrived: 3:20 Departed: _____ Collectors: SH, DF, LZ

Stream: Uppu Mica Lake Location Description: Below Petersa

UTMs: N 43.78182 W - 110.84663 Datum: NAD83

Elevation: 9562 ft Site name on GPS: _____

Water quality (Recorded with a YSI Pro Plus Multitprobe)

Parameter	Value	Units
Water temperature	2.1	°C
Barometric pressure		mmHg
DO		% saturation
DO		mg/L
Specific conductivity (SPC)	2.2	µS/cm
Conductivity	1.2	µS/cm
pH		
ORP		mV
Air temp $\text{NO}_3\text{-N}$	0.04	°C msl

Last calibrated: 7/25 DO: —

Photos taken: Site Temp Probe

Weather: Sunny + hot, light breeze

Substrate type: Gravel + Cobble

Number of Surbers collected: 6

Aspect: —

Slope: —

Biofilm rank: Little Medium Green

Pfankuck Index

	Excellent	Good	Fair	Poor	Score
Angularity	Lots of edges (1)	Some edges, some round (2)	Rounded edges (3)	All round (4)	2
Brightness (Dull = biofilm)	Most surfaces dull (1)	Mostly dull, <35% bright (2)	50/50 dull & bright (3)	Mostly bright, >65% (4)	4
Scour	<5% evidence of scour (6)	5-30% of bed scoured (12)	30-50% of bed scoured (18)	>50% of bed scoured (24)	24
Consolidation of substrate	Lots of sizes, tightly packed (2)	Moderately packed, some size overlap (4)	Mostly loose, not much overlap (6)	Totally loose, easily moved (8)	6
Aquatic Veg	Abundant veg, moss in swift water (1)	Common veg or algae, lots in pools (3)	Spotty, in backwater or season algae (3)	Perennial types, very scarce or absent (4)	4

Depends of channel

Temp logger number: Reward logger but did not redeploy Coordinates: UTM: N _____ W - _____

Stream width (m): on back Depth (cm): _____

Suspended Solids:

Filter number	4	5	6
Volume filtered (mL)	100	150	200

Notes (continue on back):

Measured variables on western stream, but probably eastern last year.
Habis buried under straw. Habits down lower where 2 streams meet.
Eastern stream had smaller substrate than western.

left

Distance cm	0	30	60	90	120	150
Depth cm	6	5	3	7	4	5

Lower Mica site (from 2015)

Temp 12.2°C

SPC 12.3 μ S/cm

Cond 9.3

NO_3^- N 0.08 mg/L

Teton Stoneflies 2016

WYNDD-Tronstad 307-766-3115

Date: 29 July 2016

Time: Arrived: 1:15 Departed: 3:15

Collectors: SH, DF, LZ

Stream: Upper Middle Teton

Location Description: Below Middle Teton Glacier

UTMs: N 43,72767

W - 110,79539

Datum:

Elevation: 9503 ft

Site name on GPS:

Water quality (Recorded with a YSI Pro Plus Multprobe)

Parameter	Value	Units
Water temperature	24	°C
Barometric pressure		mmHg
DO		% saturation
DO		mg/L
Specific conductivity (SPC)	24	µS/cm
Conductivity	1.4	µS/cm
pH		
ORP		mV
Air temp	NO ₃ N 0.05	mg/L

Last calibrated: 7/25 DO: —

Photos taken: Site ✓ Temp Probe ✓

Weather: Sunny, hot, calm

Substrate type: Cobble + boulders

Number of Surbers collected: 5

Aspect: —

Slope: —

Biofilm rank: Little Medium Green

Pfankuck Index

	Excellent	Good	Fair	Poor	Score
Angularity	Lots of edges (1)	Some edges, some round (2)	Rounded edges (3)	All round (4)	2
Brightness (Dull = biofilm)	Most surfaces dull (1)	Mostly dull, <35% bright (2)	50/50 dull & bright (3)	Mostly bright, >65% (4)	4
Scour	<5% evidence of scour (6)	5-30% of bed scoured (12)	30-50% of bed scoured (18)	>50% of bed scoured (24)	15
Consolidation of substrate	Lots of sizes, tightly packed (2)	Moderately packed, some size overlap (4)	Mostly loose, not much overlap (6)	Totally loose, easily moved (8)	8
Aquatic Veg	Abundant veg, moss in swift water (1)	Common veg or algae, lots in pools (2)	Spotty, in backwater or season algae (3)	Perennial types, very scarce or absent (4)	1.5

dull, kind of sour, lot of loose material, stream flowing over grass

mosses + plants in ripples, but not abundant

Temp logger number: Retrieved logger, broke cable w/ rock!

Coordinates: UTM: N _____ W - _____

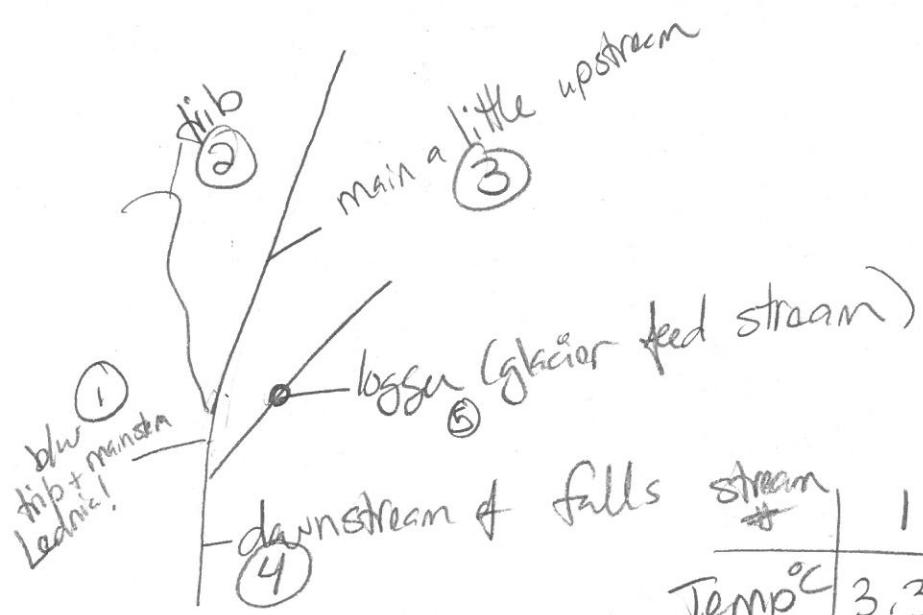
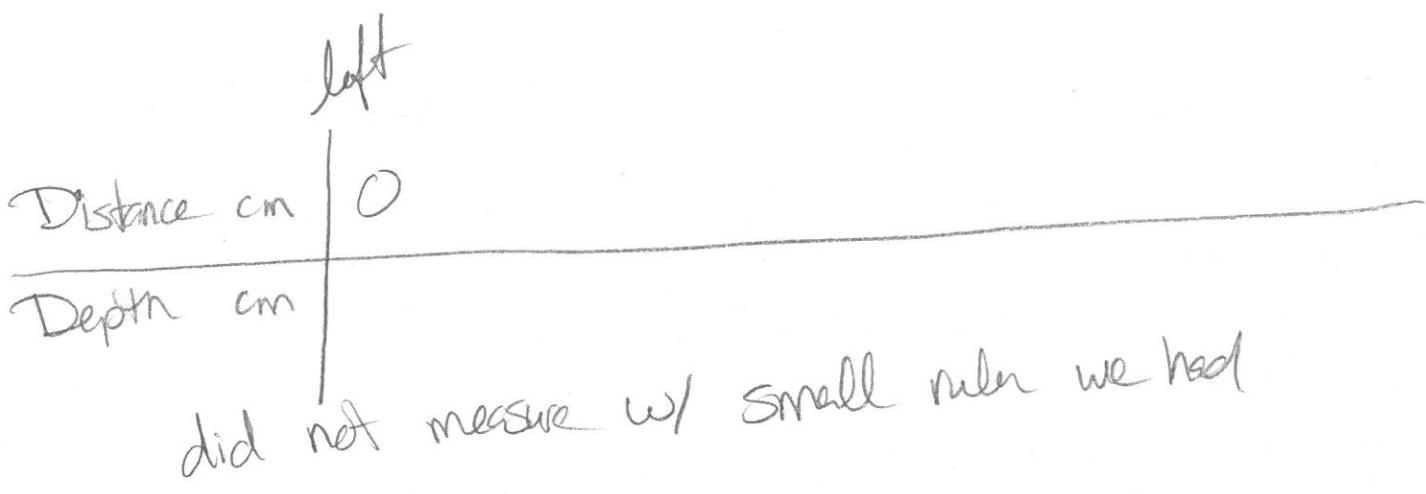
Stream width (m): on back Depth (cm): _____

Suspended Solids:

Filter number	7	8	9
Volume filtered (mL)	150	100	100

Notes (continue on back):

Really smoky
Leptania in lower stream. Retrieved Hobo at lower site
3 trips



	1	2	3	4	5
Temp °C	3.3	3.2	3.4	4.6	7.2
SPC	8.1	8.0	8.0	6.4	2.9
Cond	4.7	4.7	4.7	3.9	2.0
NO ₃	.07	.11	.07	0.08	0.02

Teton Stoneflies 2016

WYNDD-Tronstad 307-766-3115

Date: 1 Aug 2016

Time: Arrived: 5:00pm Departed: 6:00pm Collectors: AT, SA, DF

Stream: Death Rock Glacier 4 Location Description: Cobble stream, steady

UTMs: N 509086 W - 4832250 Datum: NAD83

Elevation: 9687 ft Site name on GPS: Death Rock-Glacier 4

Water quality (Recorded with a YSI Pro Plus Multitprobe)

Parameter	Value	Units
Water temperature	1.4	°C
Barometric pressure	-	mmHg
DO	-	% saturation
DO	-	mg/L
Specific conductivity (SPC)	204.2	µS/cm
Conductivity	111.8	µS/cm
pH	8.06	
ORP	92.4	mV
Air temp		°C

Last calibrated: 7/30 DO: — forget sensor!

Photos taken: Site ✓ Temp Probe ✓

Weather: Sunny, light breeze

Substrate type: Stable, cobbles

Number of Surbers collected: 6

Aspect: 274°

Slope: 7°

Biofilm rank: Little Medium Green

Pfankuck Index

	Excellent	Good	Fair	Poor	Score
Angularity	Lots of edges (1)	Some edges, some round (2)	Rounded edges (3)	All round (4)	2 5
Brightness (Dull = biofilm)	Most surfaces dull (1)	Mostly dull, <35% bright (2)	50/50 dull & bright (3)	Mostly bright, >65% (4)	3 → Δs from v. dull right at source to brighter dls ↑
Scour	<5% evidence of scour (6)	5-30% of bed scoured (12)	30-50% of bed scoured (18)	>50% of bed scoured (24)	6
Consolidation of substrate	Lots of sizes, tightly packed (2)	Moderately packed, some size overlap (4)	Mostly loose, not much overlap (6)	Totally loose, easily moved (8)	4
Aquatic Veg	Abundant veg, moss in swift water (1)	Common veg or algae, lots in pools (3)	Spotty, in backwater or season algae (3)	Perennial types, very scarce or absent (4)	2 → Similar story as lots moss w/s, decreases dls

Temp logger number: 10972590 Coordinates: UTM: N 1210509088 W - 4832242

Stream width (m): on back Depth (cm): 9 cm

Suspended Solids:

Filter number	10	11	12
Volume filtered (mL)	9 × 60 mL = 540 mL	9 × 60 mL = 540 mL	600 mL

Notes (continue on back):

logger; Placed logger at head of stream, where water bubbles out of rocks

stream

	left					Right
Distance cm	0	30	60	90	120	160
Depth cm	0	7	7	8	11	3

Teton Stoneflies 2016

WYNDD-Tronstad 307-766-3115

Date: 2 Aug 2016

Time: Arrived: 1:00 Departed: 2:30pm Collectors: DT, SH, DF

Stream: Alaska Basin South Rock Glacier Location Description: Near Sheep Steps, S. Alaska

UTMs: N 43,69276 W - 110,85847 Datum: NAD83 Basin

Elevation: 9464 ft Site name on GPS: Alaska Basin S Rock Glacier

Water quality (Recorded with a YSI Pro Plus Multitprobe)

Parameter	Value	Units
Water temperature	2.2	°C
Barometric pressure		mmHg
DO		% saturation
DO		mg/L
Specific conductivity (SPC)	198.1	µS/cm
Conductivity	111.9	µS/cm
pH	7.86	
ORP	103.0	mV
Air temp	hot!	°C

Last calibrated: 7/30 DO: —

Photos taken: Site ✓ Temp Probe ✓

Weather: Sunny, breezy, hot!

Substrate type: Cobble + loose gravel

Number of Surbers collected: 6

Aspect: 341°

Slope: 40

Biofilm rank: Little

Medium

Green
bits of
slick algae
moss, near
water

Pfankuck Index

	Excellent	Good	Fair	Poor	Score
Angularity	Lots of edges (1)	Some edges, some round (2)	Rounded edges (3)	All round (4)	1
Brightness (Dull = biofilm)	Most surfaces dull (1)	Mostly dull, <35% bright (2)	50/50 dull & bright (3)	Mostly bright, >65% (4)	1
Scour	<5% evidence of scour (6)	5-30% of bed scoured (12)	30-50% of bed scoured (18)	>50% of bed scoured (24)	6
Consolidation of substrate	Lots of sizes, tightly packed (2)	Moderately packed, some size overlap (4)	Mostly loose, not much overlap (6)	Totally loose, easily moved (8)	4
Aquatic Veg	Abundant veg, moss in swift water (1)	Common veg or algae, lots in pools (3)	Spotty, in backwater or season algae (3)	Perennial types, very scarce or absent (4)	1.5

Temp logger number: 10972585 Coordinates: UTM: N 43,69276 W - 110,85853

Stream width (m): on back Depth (cm):

Suspended Solids:

Filter number	013	014	015
Volume filtered (mL)	400	400	500

Notes (continue on back):

left

Distance cm	0	30	60	90	120	175
Depth cm	2	6.5	7	6	9	2

Teton Stoneflies 2016

WYNDD-Tronstad 307-766-3115

Date: 2 Aug 2016

Time: Arrived: 3:30 pm Departed: 4:15

Collectors: JK, SH, DF

Stream: Upper South Fork Teton Cr

Location Description: Alaska Basin (Report from

UTMs: N 43,69078°

W - 110,84,109°

Datum: NAD83

last year

Elevation: 9900 ft

Site name on GPS:

Upper SF Teton Cr

Water quality (Recorded with a YSI Pro Plus Multitprobe)

Parameter	Value	Units
Water temperature	15.8	°C
Barometric pressure		mmHg
DO		% saturation
DO		mg/L
Specific conductivity (SPC)	61.5	µS/cm
Conductivity	50.7	µS/cm
pH	8.21	
ORP	170.0	mV
Air temp		°C

Last calibrated: 7/30 DO: —

Photos taken: Site ✓ Temp Probe NA

Weather: Sunny, breezy

Substrate type: Cobble, fine gravel

Number of Surbers collected: 6

Aspect: 270°

Slope: 3°

Biofilm rank: Little Medium Green

Not very slippy in comparison to other sites

Pfankuck Index

	Excellent	Good	Fair	Poor	Score
Angularity	Lots of edges (1)	Some edges, some round (2)	Rounded edges (3)	All round (4)	2
Brightness (Dull = biofilm)	Most surfaces dull (1)	Mostly dull, <35% bright (2)	50/50 dull & bright (3)	Mostly bright, >65% (4)	4
Scour	<5% evidence of scour (6)	5-30% of bed scoured (12)	30-50% of bed scoured (18)	>50% of bed scoured (24)	12
Consolidation of substrate	Lots of sizes, tightly packed (2)	Moderately packed, some size overlap (4)	Mostly loose, not much overlap (6)	Totally loose, easily moved (8)	6
Aquatic Veg	Abundant veg, moss in swift water (1)	Common veg or algae, lots in pools (3)	Spotty, in backwater or season algae (3)	Perennial types, very scarce or absent (4)	3

Temp logger number: NA Coordinates: UTM: N — W —

Stream width (m): on back Depth (cm):

Suspended Solids:

Filter number	16	17	18
Volume filtered (mL)	600	600	600

Notes (continue on back):

We sampled above where we placed the logger last year, ~150m upstream. Less steep here w/ nice riffles

	left				
Distance cm	0	30	60	90	135
Depth cm	0	11	9	8	3

Teton Stoneflies 2016

WYNDD-Tronstad 307-766-3115

Date: 2 Aug 2016

Time: Arrived: 5:45 pm Departed: 6:45 Collectors: AT SH DF

Stream: Alaska Basin Rock Glacier North Location Description: Alaska Basin

UTMs: N 0512833 W - 4838607 Datum: NAD83

Elevation: 10,139 ft Site name on GPS: Alaska Rock Glacier North

Water quality (Recorded with a YSI Pro Plus Multprobe)

Parameter	Value	Units
Water temperature	3.5	°C
Barometric pressure		mmHg
DO		% saturation
DO		mg/L
Specific conductivity (SPC)	94.3	µS/cm
Conductivity	55.6	µS/cm
pH	7.60	
ORP	106.4	mV
Air temp	hot	°C

Last calibrated: 7/30 DO: — At trail head

Photos taken: Site ✓ Temp Probe ✓

Weather: Sunny, breezy

Substrate type: Cobble

Number of Surbers collected: Ce

Aspect: 201°

Slope: 3°

Biofilm rank: Little Medium Green

Pfankuck Index

	Excellent	Good	Fair	Poor	Score
Angularity	Lots of edges (1)	Some edges, some round (2)	Rounded edges (3)	All round (4)	1
Brightness (Dull = biofilm)	Most surfaces dull (1)	Mostly dull, <35% bright (2)	50/50 dull & bright (3)	Mostly bright, >65% (4)	1
Scour	<5% evidence of scour (6)	5-30% of bed scoured (12)	30-50% of bed scoured (18)	>50% of bed scoured (24)	12
Consolidation of substrate	Lots of sizes, tightly packed (2)	Moderately packed, some size overlap (4)	Mostly loose, not much overlap (6)	Totally loose, easily moved (8)	4
Aquatic Veg	Abundant veg, moss in swift water (1)	Common veg or algae, lots in pools (3)	Spotty, in backwater or season algae (3)	Perennial types, very scarce or absent (4)	2

Temp logger number: 10972586 Coordinates: UTM: N 0512833 W - 4838624

Stream width (m): on back Depth (cm):

Suspended Solids:

Filter number	19	20	21
Volume filtered (mL)	500	400	600

Notes (continue on back): sporadic pulses of "stuff" in water

Hobo - took for rusty rock at margin of stream (left side looking upstream)
Logger is 1.5 m downstream.

left

Distance cm	0	30	60	90
Depth cm	2	3	4	3

Teton Stoneflies 2016

WYNDD-Tronstad 307-766-3115

Date: 3 Aug 2016Time: Arrived: 2:00 pm Departed: 3:30Collectors: AT, DF, SHStream: Upper S CascadeLocation Description: SE of Schoolroom GlacierUTMs: N 0513050W - 4840810Datum: NAD83Elevation: 10,389 ftSite name on GPS: S Cascade Rock Glacier #4

Water quality (Recorded with a YSI Pro Plus Multitprobe)

Parameter	Value	Units
Water temperature	<u>0.2</u>	°C
Barometric pressure		mmHg
DO		% saturation
DO		mg/L
Specific conductivity (SPC)	<u>151.5</u>	µS/cm
Conductivity	<u>79.6</u>	µS/cm
pH	<u>8.30</u>	
ORP	<u>111.3</u>	mV
Air temp		°C

Last calibrated: 7/30 DO: -Photos taken: Site Temp Probe Weather: Sunny, WindySubstrate type: Cobble + gravelNumber of Surbers collected: 6Aspect: 358°Slope: 11°Biofilm rank: Little Medium Green

Pfankuck Index

	Excellent	Good	Fair	Poor	Score
Angularity	Lots of edges (1)	Some edges, some round (2)	Rounded edges (3)	All round (4)	<u>2</u>
Brightness (Dull = biofilm)	Most surfaces dull (1)	Mostly dull, <35% bright (2)	50/50 dull & bright (3)	Mostly bright, >65% (4)	<u>1</u>
Scour	<5% evidence of scour (6)	5-30% of bed scoured (12)	30-50% of bed scoured (18)	>50% of bed scoured (24)	<u>12</u>
Consolidation of substrate	Lots of sizes, tightly packed (2)	Moderately packed, some size overlap (4)	Mostly loose, not much overlap (6)	Totally loose, easily moved (8)	<u>3</u>
Aquatic Veg	Abundant veg, moss in swift water (1)	Common veg or algae, lots in pools (3)	Spotty, in backwater or season algae (3)	Perennial types, very scarce or absent (4)	<u>2</u>

Temp logger number: 10972589 Coordinates: UTM: N 0513059 W - 4840833Stream width (m): on back Depth (cm): -

Suspended Solids:

Filter number	<u>22</u>	<u>23</u>	<u>24</u>
Volume filtered (mL)	<u>400</u>	<u>300</u>	<u>300</u>

Notes (continue on back): Same stream as our site last year. Snow melted a lot and exposed areas this year that were under snow field last year. Took samples below outlet of rock glacier

2 channels

left	25cm	50cm	75cm	100cm	right (downstream)
0					- distance
1cm	4cm	6cm	3cm	1cm	- depth

other channel

left	0	40cm	80cm	distance
2cm	3cm	1cm	depth	

Teton Stoneflies 2016
WYNDD-Tronstad 307-766-3115

Date: 3 Aug 2016

Time: Arrived: 4:45pm Departed: 5:40 Collectors: DT, SH, DF

Stream: Rock Glacier Spring Creek Location Description: Below Schoolroom Glacier

UTMs: N 0512566 W - 4841724 Datum: NAD83

Elevation: 9986 ft Site name on GPS: TR15 S Cascade Rock Glacier 6
Downstream 25m of head

Water quality (Recorded with a YSI Pro Plus Multitprobe)

Parameter	Value	Units
Water temperature	4.6	°C
Barometric pressure	8.0	mmHg
DO		% saturation
DO		mg/L
Specific conductivity (SPC)	130.2	µS/cm
Conductivity	79.9	µS/cm
pH	8.20	8.39
ORP	199.0	mV
Air temp		°C

Last calibrated: 7/30 DO: —

Photos taken: Site ✓ Temp Probe ✓

Weather: Sunny, breezy

Substrate type: Cobble + gravel

Number of Surbers collected: 6

Aspect: 70°

Slope: 20°

Biofilm rank: Little Medium Green

Pfankuck Index

	Excellent	Good	Fair	Poor	Score
Angularity	Lots of edges (1)	Some edges, some round (2)	Rounded edges (3)	All round (4)	1
Brightness (Dull = biofilm)	Most surfaces dull (1)	Mostly dull, <35% bright (2)	50/50 dull & bright (3)	Mostly bright, >65% (4)	1
Scour	<5% evidence of scour (6)	5-30% of bed scoured (12)	30-50% of bed scoured (18)	>50% of bed scoured (24)	12
Consolidation of substrate	Lots of sizes, tightly packed (2)	Moderately packed, some size overlap (4)	Mostly loose, not much overlap (6)	Totally loose, easily moved (8)	3
Aquatic Veg	Abundant veg, moss in swift water (1)	Common veg or algae, lots in pools (3)	Spotty, in backwater or season algae (3)	Perennial types, very scarce or absent (4)	2

Temp logger number: 10972588 Coordinates: UTM: N 0512566 W - 4841723

at head of stream

Stream width (m): 5m back Depth (cm):

Suspended Solids:

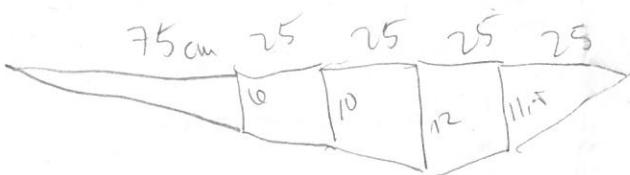
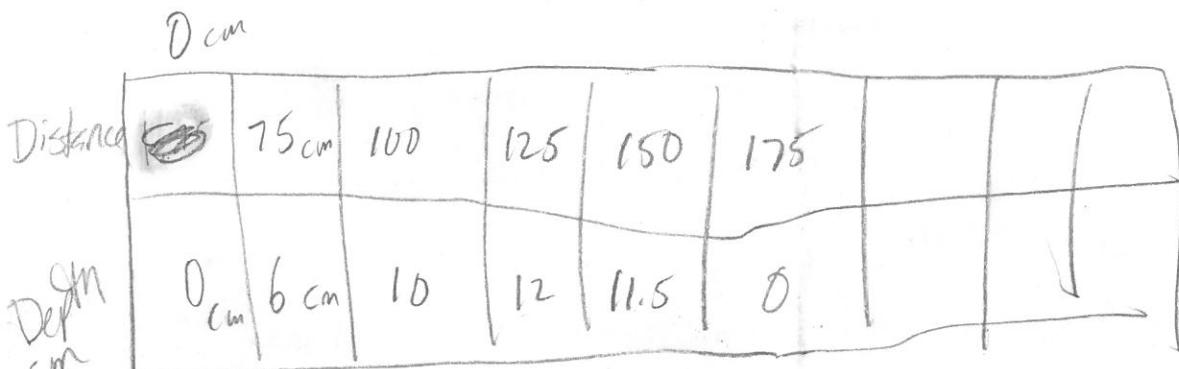
Filter number	25	26	27	28
Volume filtered (mL)	6000 mL	6000	6000	6000

Notes (continue on back):

saw moose bull grunting & doe deer.
Lodnia!

30 m downstream of head

stream profile (all cm)



Teton Stoneflies 2016

WYNDD-Tronstad 307-766-3115

Date: 5 Aug 2016

Time: Arrived: 4:00pm Departed: 5:00pm Collectors: AT + ST

Stream: Upper North Fork Teton Creek Location Description: Near Table Mountain

UTMs: N 43.777450 W - 110,85948 Datum: NAD83

Elevation: 9756 ft Site name on GPS: -

Water quality (Recorded with a YSI Pro Plus Multitprobe)

Parameter	Value	Units
Water temperature	15.5	°C
Barometric pressure		mmHg
DO		% saturation
DO		mg/L
Specific conductivity (SPC)	11.6	µS/cm
Conductivity	9.5	µS/cm
pH	6.76	
ORP	195.3	mV
Air temp		°C

Last calibrated: 8/16 DO: -

Photos taken: Site ✓ Temp Probe -

Weather: Overcast

Substrate type: Cobble

Number of Surbers collected: 6

Aspect: 163°

Slope: 30

Biofilm rank: Little Medium Green

Pfankuck Index

	Excellent	Good	Fair	Poor	Score
Angularity	Lots of edges (1)	Some edges, some round (2)	Rounded edges (3)	All round (4)	2
Brightness (Dull = biofilm)	Most surfaces dull (1)	Mostly dull, <35% bright (2)	50/50 dull & bright (3)	Mostly bright, >65% (4)	1
Scour	<5% evidence of scour (6)	5-30% of bed scoured (12)	30-50% of bed scoured (18)	>50% of bed scoured (24)	6
Consolidation of substrate	Lots of sizes, tightly packed (2)	Moderately packed, some size overlap (4)	Mostly loose, not much overlap (6)	Totally loose, easily moved (8)	4
Aquatic Veg	Abundant veg, moss in swift water (1)	Common veg or algae, lots in pools (3)	Spotty, in backwater or season algae (3)	Perennial types, very scarce or absent (4)	2

Temp logger number: Picked up (retire) logger Coordinates: UTM: N _____ W - _____

Stream width (m): on back Depth (cm): _____

Suspended Solids:

Filter number	29	30	31
Volume filtered (mL)	600	600	600

Notes (continue on back):

Granite bedrock, which likely explains low conductivity. No snowfields or signs of rock glaciers. Likely Ground water fed stream. Surbers tend to collect blk of large substrate size, shallow water depth and embedded patches.

Stream profile

Width = 0.90 m

Distance (cm)	0	18	36	54	72	90
Depth (cm)	0	10	14	9	14	0

Teton Stoneflies 2016

WYNDD-Tronstad 307-766-3115

Date: 16 August 2016Time: Arrived: 11:30 Departed: 1:00 Collectors: AT, SA, DFStream: Upper Wind CaveLocation Description: Up Darby Canyon, N. side of TetonsUTMs: N 43.66607 W - 110,95602 Datum: NAD83Elevation: 8599 ft Site name on GPS: -

Water quality (Recorded with a YSI Pro Plus Multitprobe)

Parameter	Value	Units
Water temperature	<u>3.0</u>	°C
Barometric pressure		mmHg
DO		% saturation
DO		mg/L
Specific conductivity (SPC)	<u>146.7</u>	µS/cm
Conductivity	<u>84.9</u>	µS/cm
pH	<u>7.90</u>	
ORP	<u>85.9</u>	mV
Air temp		°C

Last calibrated: 8/5 DO: -Photos taken: Site Temp Probe -Weather: Clear skySubstrate type: CobbleNumber of Surbers collected: 7Aspect: 20°Slope: 30°Biofilm rank: Little Medium Green

Pfankuck Index

	Excellent	Good	Fair	Poor	Score
Angularity	Lots of edges (1)	Some edges, some round (2)	Rounded edges (3)	All round (4)	<u>1</u>
Brightness (Dull = biofilm)	Most surfaces dull (1)	Mostly dull, <35% bright (2)	50/50 dull & bright (3)	Mostly bright, >65% (4)	<u>1</u>
Scour	<5% evidence of scour (6)	5-30% of bed scoured (12)	30-50% of bed scoured (18)	>50% of bed scoured (24)	<u>6</u>
Consolidation of substrate	Lots of sizes, tightly packed (2)	Moderately packed, some size overlap (4)	Mostly loose, not much overlap (6)	Totally loose, easily moved (8)	<u>4</u>
Aquatic Veg	Abundant veg, moss in swift water (1)	Common veg or algae, lots in pools (3)	Spotty, in backwater or season algae (3)	Perennial types, very scarce or absent (4)	<u>1</u>

Temp logger number: Retrieve both loggers Coordinates: UTM: N _____ W - _____Stream width (m): on back Depth (cm): _____

Suspended Solids:

Filter number	<u>33</u>	<u>34</u>	<u>35</u>
Volume filtered (mL)	<u>500</u>	<u>500</u>	<u>500</u>

Notes (continue on back):

Bedrock may be sedimentary. Substrates taught to collect w/ ↓ water levels. Steep grade, shallow width. Sampled inside + outside of cave. I sampled bedrock w/ moss + cobble. Stream gets tumbled. Found rock covered w/ egg sacs (photos). Lethia adults observed ~96 m inside cave (at the farthest).

<u>cm</u>	left										right	
Distance	0	25	50	75	100	125	150	175	200	212	225	
Depth	0	1	2	0.5	0	1.5	2	2.5	1	6	0	