
SHALE editions

The edition, which is called a “printing”, is printed under the date in the top righthand corner of the “contents page”. No printing number signifies a first edition. Consult the Corrections list below for details of the differences between printings.

| | |
|-----------------|---|
| No. 1..... | 6 |
| No. 2..... | 2 |
| No. 3..... | 2 |
| No. 4..... | 2 |
| No.17..... | 2 |
| Otherwise | 1 |

SHALE Corrections: Issues 1–21

The following does not include simple spelling mistakes, grammatical errors, or formatting errors unless they affect the meaning of the sentence in some non-obvious way.

SHALE 1, November 2000

Corrected errors:

Volume number: Volume numbers were dropped after the first issue. *SHALE* Vol.1 No.1 should be referred to simply as *SHALE* No.1, see 2 (4). Corrected with Printing 4.

Acalá Galiano, 1 (front cover), 1 (1) and 1 (12–21) should be Alcalá Galiano. Corrected with Printing 5.

Galiano was commander of the *Sutil*, not the *Mexicana* (1, inside front cover). Corrected with Printing 6.

Galiano galleries 1 (12, fn. 3), should be Galiano gallery. Corrected with Printing 5.

Tomàs Bartroli, 1 (21), should be written Tomás Bartroli (accent change). Corrected with Printing 6.

Sidney, New South Wales, 1 (40), should be Sydney, New South Wales. Corrected with Printing 2.

Guipúzcoa 1 (42), is a province, not a city. Corrected with Printing 5.

Davison Bay 1 (44) should be Davidson Bay. Corrected with Printing 6.

Uncorrected errors:

In the early settlers box, 1 (25), “Stubbins” should probably be “Stubbings”. although both occur in records.

The preferred name for the late-Cretaceous basin between Vancouver Island and the mainland is now the “Nanaimo Basin” because its geography was different to the present-day Strait of Georgia 1 (26).

Wrangellia was probably below sea level before it reached North America 1 (27).

Early sedimentation was from Vancouver Island contrary to what is suggested in the footnote, 1(fn. 4).

The process described in the box “Transformations” 1 (32) is wrong in suggesting that the Nanaimo Group sandstones are cemented with calcite and laumontite. The most common cement for upper Nanaimo Group sandstone is clay.

SHALE 2, March 2001

Corrected errors:

Norman Morrison, 2 (13), should be *Norman Morison*. Corrected with Printing 2.

tle:tx^w, 2 (24), should be *tle:ltx^w*. Corrected with Printing 2.

Footnote 5, 2 (32), should be modified to include ...sea blush (*Plectritis congesta*). Corrected with Printing 2.

The statement that the stands of arbutus at Stokes Road are due to fire, 2 (33), has been challenged. Corrected with Printing 2.

...natural plants display..., 2 (33), should be ...native plants display.... Corrected with Printing 2.

Comments on climate change, 2 (30), were qualified in 3 (2–3, or 37–38).

For extensive corrections to “A French note”, 2 (36–37), see 3 (3 or 38).

Uncorrected errors:

NOTE: 11500 BC **2** (28). The radiocarbon date of the shells in the Boulton sandpit were measured as 12500 BP (conventional or uncal.). The latest calibration (2004) databases with a reservoir correction of 950 radiocarbon years gives a calibrated date of 11 435 BC. The original version is thus as correct as any.

SHALE 3, January 2002

Corrected errors:

There was an error in the page numbers in the first printing. Pages **3** (37–38) should be **3** (2–3). Corrected with Printing 2.

Picture caption **3** (26), Lt. Dawnes, should be Panter-Downes. Corrected with Printing 2. See also comments **8** (43–44).

SHALE 4, June 2002

Corrected errors:

Parti Québécoise, **4** (34), should be Bloc Québécoise. Corrected with Printing 2.

Uncorrected errors:

...darker shales... **4** (12) was correct in the first printing, but a mistake was made in Printing 2 in which it was changed to ...darker shells.... “darker shales” is correct.

The speculation on the meaning and origin of the inscription F.O.E. 11.1621, **4** (25–27) is all wrong. The Fraternal Order of Eagles were not involved and the inscription dates from November 1904. See *SHALE* 22.

SHALE 5, December 2002

Uncorrected errors:

...meaning years ago from the time of writing, or if an extra year or two is insignificant, from 2000 AD..., **5** (inside back cover), should be ...meaning years from 2000 AD.

...date is 1955 AD..., **5** (inside back cover), should be ...date is 1950 AD.

12...120 BC, **5** (inside back cover) at the bottom, should be ≈12120 BC.

14...120 BC, **5** (inside back cover) at the bottom, should be ≈14120 BC.

SHALE 6, April 2003

Corrected errors:

The square root sign, **6** (6), did not print. It was corrected by hand.

Uncorrected errors:

...one cubic metre per tonne..., **6** (31), should be ...one tonne per cubic metre.

SHALE 7, January 2004

Uncorrected errors:

Recent revisions to dates in the Tertiary Period, **7** (4) are: Paleocene 56-65; Eocene 34-56; Oligocene 23-34; Miocene 5-23; Pliocene 2-5.

The implication **7** (5) that only one river was involved is almost certainly wrong given the time span involved.

There are no scales on the graph, **7** (31). The vertical scale is stress with arbitrary units ($F1 = 4$, $F3 = 1$, $k = 0.58$); the horizontal scale is the angle ϕ . Note that the smaller of the angles of the X-shaped fracture, χ , is $2 \times (90 - \phi)$, so for $45^\circ < \phi < 67.5^\circ$, $45^\circ < \chi < 90^\circ$.

The formula $K_2Al_4[Si_6Al_2O_{20}]F(OH)_3$, **7** (44), should be $K_2Al_4[Si_6Al_2O_{20}]F(OH)_3$.

Due to a minor computer program error, there are slight errors in endnote, **7** (47). Details are as follows:

The corrected numbers for the top diagram showing cations for sandstone are: aluminium 41 (not 40) and calcium 11 (not 12).

The comment, **7** (47), on the reasons for the higher concentrations of iron and manganese in shale than sandstone has been challenged and is incorrect. The blue veneer on weathered shale is also due to manganese, not iron.

SHALE 8, January 2004

Uncorrected errors:

The conjectures in the editorial as to the cause of the accelerated weathering of the petroglyphs, **8** (4), are out of date and will be revised in a future issue of *SHALE*.

The letter on the left of **8** (32) should be signed “Woodall”, not “Goodall”.

The correct spelling, **8** (34), is dendrochronology (two errors).

SHALE 9, August 2004

Corrected errors:

The conjecture that the weathering of the beach in Lavender Bay is due to surf, **9** (25), is wrong. See extensive comments **10** (37–44).

Uncorrected errors:

Sample 02 on **9**(33) should be Samples 02-01 and 02-02.

Hexahydrate, **9** (39), should be *hexahydrite*.

The conjecture that the spheroidal weathering of mudrock, **9** (48), is due to shrinkage is wrong. This will be revised in a future issue of *SHALE*.

Due to a computer program error, many of the numbers in the endnote, **9** (49–52), are slightly incorrect. Details are as follows:

On **9** (49), note that the bottom two diagrams are by weight, not as annotated or as intended, by number. The corrected numbers for the bottom diagram showing anions in the host mudrock are: silicon 84 (not 92) and carbon 15 (not 7). The corrected numbers for the diagram above it showing anions in the nodule are: carbon 64 (not 51), silicon 22 (not 28), phosphorus 9 (not 12), and sulphur 5 (not 9).

On **9** (49), in the first table, calcium 43 (not 42), sub-total 90 (not 89), aluminum [8] (not 9), others 0 (not 1).

On **9** (49), in the bottom table, carbon 42 [64] (not 50 [71]), silicon 35 [22] (not 28 [17]), phosphorus 15 [9] (not 13 [7]), and sulphur 8 (not 9).

On **9** (50), second nodule type A results, aluminum (8) (not 9), carbon (64) (not 71), silicon (22) (not 17), and phosphorus (9) (not 7).

On **9** (50), third nodule type B results, aluminum (8) (not 9), carbon (64) (not 71), silicon (22) (not 17), and phosphorus (9) (not 7).

On **9** (50), fourth nodule type S results, aluminum (8) (not 9), silicon 65(22) not (63(17)), phosphorus 23(9) not 22(7), and carbon 11(64) not 14(71).

On **9** (51), fossil nodule results, sodium 2 (not 3), carbon 51(64) (not 60(71)), silicon 41(22) (not 33(17)), phosphorus 6(9) (not 4(7)), and sulphur 2 (not 3).

In drawing the fractures in the Malaspina Galleries article, I should have pointed out that for simplicity I was ignoring the dip of the fractures and portraying them as being perfectly vertical, which they’re not; **9** (54, 56).

Also, I suggested that the thin beds of mudrock in the sandstone were relatively impervious. In fact, the opposite is more likely—water seeps are often from a little below, not a little above, the beds. In any event, the interbeds do assist in bringing groundwater to the erosion surface; **9** (56).

SHALE 10, January 2005

Uncorrected errors:

The “approximately equal to” symbol “≈” in ...corrected azimuth ≈5°... **10** (26), was not printed.

The annotation “P280” is missing from the diagram, **10** (29) top right.

SHALE 11, May 2005

Uncorrected errors:

The weight of the evidence is that Alexander Shaw, **11** (9), was born in 1835, not as assumed in 1833.

The caption for the photograph **11** (14) is wrong. The children are standing on the steps of the school, not the Community Hall. The building in the background is the house built for the schoolteacher.

The correct spelling of “Lilian Roth [or Rath?]”, **11** (16), is “Roth”.

That evaporation from sandstone is a “possible cause” of honeycombing is more certain than implied **11** (38).

Kaolinite and *montmorillonite* should be reversed **11** (40). The latter is far more common.

It may not be true that surface water is supported mostly by “glaciofluvial” deposits **11** (40). They may be glacial. Much of the clay is a product of feldspar weathering possibly in the late-Pleistocene.

The groundwater reference list, **11** (43–44), should have included: D.M. Allen and G.P. Matsuo, *Results of the Groundwater Geochemistry Study of Hornby Island, British Columbia*, Islands Trust Report, April 2002.

SHALE 13, June 2006

Uncorrected errors:

It is very unlikely that the viceroy of Peru, Francisco Gil, was Pantoja's mentor **13** (23, fn.35).

SHALE 15, May 2007

Uncorrected errors:

Bricks stamped I-XL (meaning "I excel"), **15** (32,fn.9) were made by I-XL Industries Ltd., an Albertan brick-making company. Their bricks can be found throughout western Canada. Probably the few such bricks found lying on the ground on Gabriola were brought here recently and have no particular historical significance.

SHALE 16, July 2007

Uncorrected errors:

The last sentence of Appendix 1 on **16** (38) doesn't make sense. It should be replaced with: "Finding such a deposit that dates to within the last 2000 years would support the rising sea level hypothesis."

SHALE 17, September 2007

Corrected errors:

The text and caption on **17** (48) implies that *Betelgeuse* appears highest in the sky at azimuth 194°. This is wrong. All stars in the southern sky are at their maximum height as they cross the meridian at azimuth 180°. This error was addressed in the box **18** (13). Noted in Printing 2.

The museum petroglyph replica top left **17** (46) is as seen in the museum grounds but nevertheless is a mirror image of the original. Mirrored to accord with the original in Printing 2. See **18** (9).

The reference to ferric iron **17** (52) might need to be the more soluble ferrous iron, but a significant source of iron is the weathering of biotite, which does expel ferric rather than ferrous iron. Changed to ferrous in Printing 2 and back again to ferric in Printing 3.

The figure in the caption on **17** (57) should be 109° not 119°. Corrected with Printing 2.

SHALE 18, April 2008

Uncorrected errors:

The footnote **18** (26, fn.39) is incomplete. It should have read: Wagner, *Cartography...*, p.499 says Eliza made the change, but this is unlikely as Pantoja didn't know about it and yet says all naming was done "in the presence of the commander, chief of the expedition [Eliza]".

The mirror note **18** (36–7) contains several errors.

In the footnote **18** (52, fn.32), "Cedar Fm. –770 m: Protection Fm. –610 m" should have been "Cedar Fm. –610 m: Protection Fm. –770 m".

SHALE 19, November 2008

Uncorrected errors:

"Murray" **19** (11) should be "Murray".

In caption **19** (18), 123°51'30"W should be 123°51'36"W.

In the footnote **19** (42, fn.4), "Dennis E. Canessa" should have been "Dennis G. Canessa". Add at the end "Her daughter, Donna L. Wess, lives with her."

"1840" **19** (43) should be "1850".

Change the sentence **19** (46), "They lived in the lower mainland..." to "They lived mainly in the lower mainland. However, Caroline in her later years lived with her daughter in Kamloops, where she died at 94 in 1972."

Add a comma **19** (46), "...my informant,".

Change **19** (46), "...Byron and Hogel ("Jack"), and a daughter Zelma" to "...Byron and Hogel ("Jack"), and a daughter Rosabel".

SHALE 20, April 2009

Uncorrected errors:

Some of the captions **20** (48–51) were truncated in the printed version. The online version is correct.

NW: Berry Point: Observations: 294, ND

| | dev. | ori | amp | σ/2 | % |
|----------|------|-------|-----|-------|----|
| ND-BP-E | +0° | N76°W | 0.2 | ±3.8° | 4 |
| ND-BP-C1 | +1° | N55°W | 0.5 | ±9.0° | 24 |

| | | | | | |
|----------|-------|--------|----------|--------|----|
| ND-BP-C3 | -4° | N29° W | 0.5 | ±4.8° | 13 |
| ND-BP-B | -2° | N5° W | 0.3 | ±6.1° | 10 |
| ND-BP-A | -3° | N26° E | 1.0 | ±6.7° | 36 |
| ND-BP-G | trace | N51° E | observed | | |
| ND-BP-F | +1° | N74° E | 0.2 | ±11.9° | 13 |

NW: Berry Point: Observations: 71, DM DM-00-022, DM-00-023, DM-00-024, DM-00-025

| | dev. | ori | amp | $\sigma/2$ | % |
|-----------|------|--------|-----|------------|----|
| DM-BP-C1* | +11° | N45° W | 0.2 | ±7.0 | 10 |
| DM-BP-H | -2° | N14° E | 0.6 | ±9.0 | 37 |
| DM-BP-A | +0° | N29° E | 0.6 | ±6.0 | 25 |
| DM-BP-F | -2° | N71° E | 1.0 | ±4.0 | 28 |

*or DM-BP-C2? (dev. = -9°)

NW: Leboeuf Bay: Observations: 202, DM DM-00-018, DM-00-019

| | dev. | ori | amp | $\sigma/2$ | % |
|----------|-------|---------|-----|------------|----|
| DM-LB-E | -7° | N83° W | 0.5 | ±3.5° | 8 |
| DM-LB-C1 | -8° | N64° W | 0.5 | ±8.0° | 17 |
| DM-LB-C3 | +0° | N25° W | 0.5 | ±10.0° | 22 |
| DM-LB-B | +1° | N2° W | 0.9 | ±4.0° | 16 |
| DM-LB-A | -3° | N26° E | 0.5 | ±6.0° | 13 |
| DM-LB-G | -7° | N40° E | 0.3 | ±18.0° | 24 |
| DM-LB-F | trace | N73° E? | | | |

NW: Descanso (east): Observations: 43, ND

| | dev. | ori | amp | $\sigma/2$ | % |
|----------|-------|---------|-----|------------|----|
| ND-DE-E | trace | N76° W? | | | |
| ND-DE-C1 | -3° | N59° W | 0.9 | ±5.5° | 37 |
| ND-DE-C2 | +0° | N36° W | 0.5 | ±6.0° | 23 |
| ND-DE-B | -5° | N8° W | 1.0 | ±4.0° | 30 |
| ND-DE-H | +0° | N16° E | 0.2 | ±6.5° | 10 |

Dan Mackie's results not included as they involve detail around the fracture in Cox's Bay.

C: Interior (south): Observations: 50, ND

| | dev. | ori | amp | $\sigma/2$ | % |
|---------|------|--------|-----|------------|----|
| ND-IS-E | +7° | N69° W | 0.2 | ±6.0° | 17 |
| ND-IS-H | +1° | N17° E | 0.9 | ±6.5° | 80 |
| ND-IS-A | +5° | N34° E | 0.1 | ±2.5° | 3 |

C: Brickyard Beach: Observations: 23, ND

| | dev. | ori | amp | $\sigma/2$ | % |
|---------|------|--------|-----|------------|----|
| ND-BY-E | +2° | N74° W | 1.0 | ±3.5 | 60 |
| ND-BY-H | -1° | N15° E | 0.2 | ±7.0 | 24 |
| ND-BY-A | -2° | N27° E | 0.3 | ±3.0 | 16 |

On page 20 (48), top left, the diagram annotations are wrong for ND-BP-E (should be -76° not -77°); ND-BP-C1 (should be -55° not -50°); ND-BP-C3 (should be -29° not -28°); ND-BP-B (should be -5° not 1°); and ND-BP-F (should be 74° not 71°). The online version is correct.

SHALE 21, July 2009

Uncorrected errors:

Caption on inside front cover. It should have said "Decourcy Drive", not "McConvey Road".

In the article on radiocarbon dates, "Sample 6", 21 (50) should be "Sample 7" and "1455 AD" should be "1445 AD".

Add to 21 (50): Sample 8 calibrated with a variable local reservoir correction becomes 1280 AD.