ᐊᐃᑕᑦᑑᒃᑐᖅᑕᐅᖅᑕᐅᖅᑕᐅ

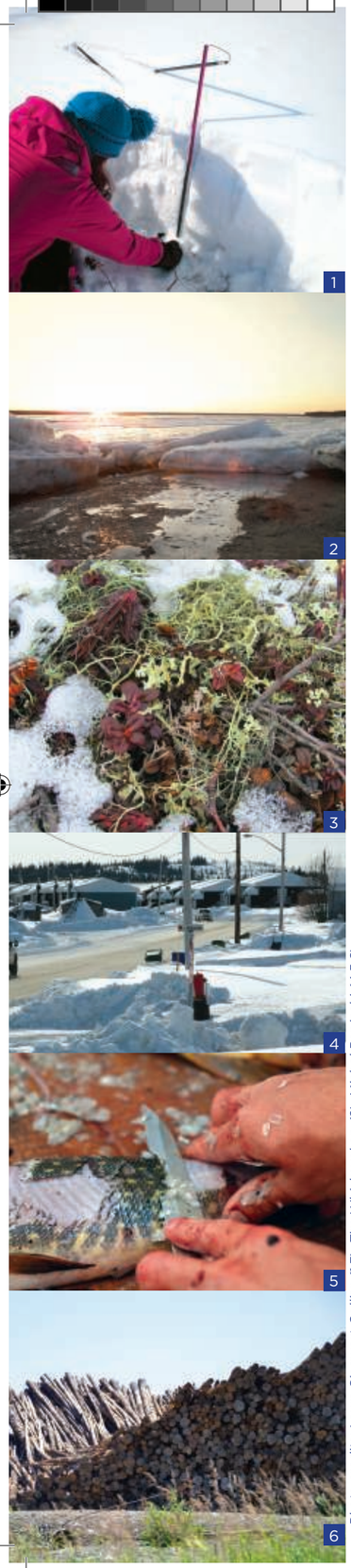


Photo credits: Laura Siegwart Collier (1,3), Tim Whiskeychan (2), Michel Rapinski (4,5,6)

ᑕᐊᓐ ᐊᓯᒪᑕᐃᑕᑉᒃᑲᒃ ᑭᓯᑯ ᐊᓯᒥᔅᑯᒋᐱᐃᒃ ᐊᓐᑕ ᐱᑎᓱ ᐊᔅᒋᒃ ᒐᑉᑲᓐ ᐊᑎᑕᑉᒃᑲᒃᓵ

ᐊᔭᓯᐱᐃᑦ ᑯᓐ ᐊᔅᐱᑎᑦ

- ᐊᔭᓯᐱᐃᒃ ᐊᓐᑕ ᐊᒋᑕᒃ ᐊᓯᓂᒃᑲᓯᓐᑦ ᐊᓐᑕ ᐋᒋᐱᐃᑦ ᐱᓯᒥᒃ
- ᓂᐱᔅ ᑭᔭ ᐋᐱᑭᓇ ᑭᔭ ᐊᔅᒋᔾ ᐊᑲ ᓇᐅᔅ ᐃᑎᐱᑦ ᑯᓐ ᐊᓐᑕ ᐱᓯᒻ ᐊᐳᐋᒃᓵ
- ᐊᒥᔅᑯᑎᒃ ᐊᔅᒋᔾ ᐃᐱᒃ ᐊᐸᐸᐱᐃᒃᓵ
- ᐊᓯᒥᔅᑯᒋᐱᐃᒃ ᑭᓯᑯ ᑭᔭ ᓂᐱᔾ ᐊᑕᐃᑕᑉᒃᑲᒃᓵ

ᐊᔭᐸᑕᒃ ᑕᒥᒃ ᐊᔅᒋᔾ ᐊᒥᔅᑯᑎᒃ

- ᒧᔭᒻ ᐊᓐᑕ ᐊᓯᒪᑯᔅᑦ ᐱᒥᔾ ᐊᐃᐱᐃᒃ (gas)
- ᐊᐃᐱᐃᒃ ᐊᓐᑕ ᒐᑉᑲᓐ ᐊᐃᓇᑉᒃᑲᒃ ᐊᓐᑕ ᐊᔅᐱᐃᒃ ᓂᐱᔾ ᑭᔭ ᓯᐱᒃ ᑭᔭ ᓴᑲᐃᑭᓂᒃ ᐊᓐᑕ ᐋᔅᑲᒃ ᐊᔅᒋᔾ
- ᐊᐃᓇᑉᒃᑲᒃ ᒐᑉᑲᓐ ᐊᓐᑕ ᐱᑎᓱ ᐊᔅᒋᒃ ᐊᔅᐱᐃᒃ ᒪᑉᑲᒃ ᐊᒥᔅᑯᑎᒃ ᐊᓐᑕ ᐊᔅᐱᐃᒃ ᐋᔅᑲᒃ ᐊᔅᒋᒃᓵ
- ᐋᔭᐅᒃ ᐊᑲ ᒥᔾᔭᐋᒃ ᑭᔭ ᔭᐱᒃ ᐊᐸᔅᑕᒃᓵ

ᐊᔭᐸᐱᐃᒃ ᒥᔅᑯᒥᔾ

- ᐃᐱᐃᒃ ᐊᐱᑯᐱᐃᒃ ᒥᔅᑯᒥᔾ ᐊᓐᑕ ᐃᓂᐸᑯᒃ ᑭᔭ ᓴᑲᐃᑭᓂᒃᓵ
- ᐊᑲ ᐃᐱᐃᒃ ᒥᔅᑯᑎᒃ ᐃᓂᐸᑯᒃ ᑭᔭ ᓴᑲᐃᑭᓇ
- ᐃᓂᐸᑯᒃ ᓂᐱᔾ ᐊᔅᐱᐱᐃᒃ
- ᐊᑲ ᓱᑲ ᐊᔅᐱᒋᔨᑦ ᒥᔅᑯᒥᔾ ᐊᓐᑕ ᓇᔅᒐ ᐊᑕᐃᑕᑉᒃᑲᒃ ᐱᓯᒻ

ᓇᔅᒐ ᐊᑕᐃᑕᑉᒃᑲᒃ ᑭᓯᑯ ᒥᓇᒃᑲᒃ ᐊᓐᑕ ᑭᐋᑎᓄᒃ ᐊᓯᐱᑯᓇᑉᒃᑲᓄᒃ ᐃᐱᐃᒃ ᐊᓂᐸᒃ ᐊᑲ ᒥᒐᑎᒃ ᐊᐋᓯᓯᒃ ᑭᔭ ᓂᒪᔅᒐᒃ ᑭᔭ ᓂᐱᔅᒐ

ᑕᐊᓐ ᐊᓯᒪᑕᐃᑕᒃ ᐊᓇᒃ ᐊᐋᓐᒋ ᐋᒋᒃ ᐊᓐᑕ ᑭᐋᑎᓄᒃ ᑯᐸᒃ?

ᓄᑎᒻ ᐊᓯᓐᑐᐅᓇᓄᒃ ᐊᒋᑕᐸᑕᒃᑲᓄᒃ

- ᐊᒥᔅᑯᒋᐱᐃᒃ ᐊᓐᑕ ᐊᐋᓯᓯᒃ ᐊᑎᑕᒃ ᐊᔅᒋᒃ
- ᐊᔅᐱᐱᐃᒃ ᐊᔭᑉᑯᓯᒃ ᐊᐋᓯᓯᒃ ᑭᔭ ᐊᑕᑎᓯᒃ ᐊᑲ ᒥᔪᓯᒃ ᒧᔭᒻ ᒪᐃᑭᓐ ᐅᐱᐃᔭᓵ
- ᐊᓯᒥᔅᑯᒋᐱᐃᒃ ᐊᑕᑎᓯᒃ ᐊᐋᓯᓯᒃ (ᒧᔭᒻ ᐊᒥᒐᑎᒃ Muskox ᑭᔭ ᐊᔭᓯᐱᐃᒃ ᐊᑕᑎᓯᒃ ᓂᔅᑲ ᑭᔭ ᐊᑎᑯ)
- ᓇᐅᔅ ᐊᑲ ᒥᔅᑯᑎᒃ ᓂᐱᔾ ᑭᔭ ᐊᓐᑐᐅᓇᓄᒃ ᒧᔭᒻ ᐊᒋᑯ
- ᐊᑲ ᓇᐅᔅ ᐊᑕᑦ ᒥᔅᑯᒥᔾ ᑭᔭ ᒥᔅᑯᑎᒃ ᓴᑲᐃᑭᓇ ᒐᒋ ᐊᓐᑐᐅᓂᒪᓴᓄᒃ ᑭᔭ ᐊᓐᑐᐅᓇᓄᒃ
- ᐊᓯᒥᔅᑯᒋᐱᐃᒃ ᐊᓐᑕ ᒥᓂᓴ ᐊᓯᓂᑕᐅᒋᓂᒋ (ᐱᓯᒻ ᑭᔭ ᐊᑕᑎᓂᒋ ᑭᔭ ᒐᒋ ᒥᔾᔭᐃᒋ)
- ᐃᔪᑉ ᐃᑐᐅᓐ ᐊᓯᓇᑲᑐᐋᐃᑕᑉᒃᑲᓄᒃ ᐃᔪᑉ ᒥᒥᒻ ᑭᔭ ᓇᐃᔅ ᐊᒥᔅᑯᒋᑕᑉᒃᑲᓄᒃ ᑭᔭ ᒪᒃ ᐸᔅᑕᑉ ᐃᔭᔅ ᑭᔭ ᓂᒪᔅ ᓇᓂᑯᑎᓂ ᐊᒃ ᓱᒐᐃᑕᑉᒃᑲᒃᓵ

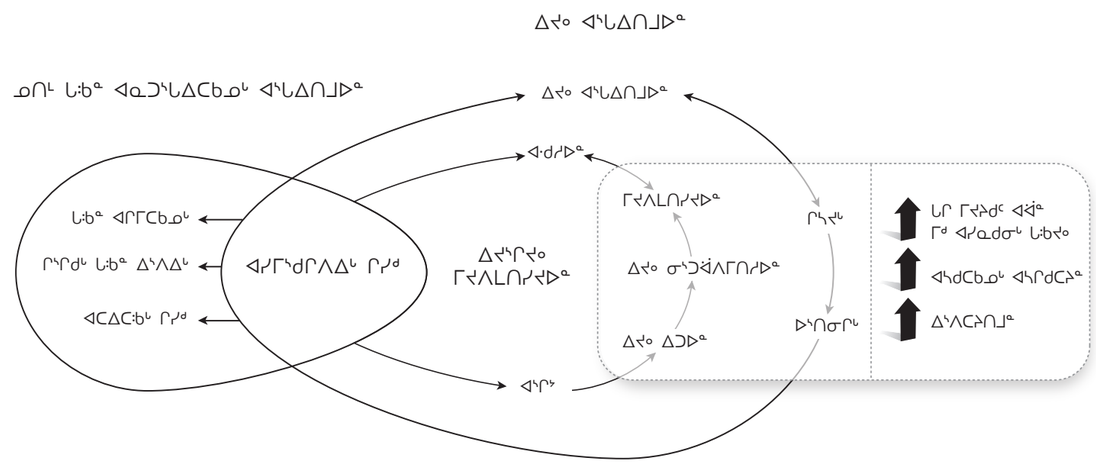
ᐊᑉᑯᓯᐅᓐ ᑭᔭ ᒪᒃ ᒥᔪᐱᒪᑎᓯᔪᐅᓐ

- ᐊᔭᔾᒥᔪᓇᓄᒃ ᒐᑉᑲᓐ ᒐᒋ ᐊᑐᑕᒃᑲᓄᒃ ᒧᔭᒻ
  - ᐊᑲ ᓱᑲ ᔭᔭᒋᑦ ᐊᐋᓐ
  - ᐊᔭᒋᐱᐃᒃ ᒐᑉᑲᓐ ᐊᔭᑲᓄᒃ ᑭᔭ ᐊᑲ ᒥᔪᒥᒍᐅᓇᓄᒃ
  - ᐊᓯᒪᑕᐃᑕᑉᒃᑲᒃ ᐊᓐᑕ ᐃᔪᑉ ᐱᒪᑎᓯᔪᐅᓂᒃ ᑭᔭ ᐃᔪᑉ ᐊᓯᐱᒪᑎᓯᒃ ᐊᓐᑕ ᑭᐋᑎᓄᒃ ᐊᔅᒋᒃᓵ
- ᐃᔅᐱᐱᐃᒃ ᐊᓐᑕ ᐊᐅᓯᑉᑯᐅᓇᓄᒃ ᐊᓐᑕ ᒥᔅᑯᒥᒃ ᑭᔭ ᐊᔅᒋᒃ (ᐊᑲ ᓱᑲ ᑯᓐ ᐊᑕᑦ ᑭᔭ ᐊᐱᑯᐱᐃᒃ ᐊᔅᒋᔾ ᑭᔭ ᐊᑭᑲᐃᑕᑉᒃᑲᒃ ᑭᓯᑯ)
- ᐊᐃᔅᐱᐱᐃᑦ ᐊᒋᑕᒃ ᑭᔭ ᐊᐸᒻᐱᐃᒃ ᐊᑉᑯᓯᐅᓐ

ᐊᑐᔅᒐᐅᓐ ᑭᔭ ᐊᒋᒥᑕᑉᒃᑲᓄᒃ ᒐᑉᑲᓐ

- ᒥᒐᑦ ᒐᑉᑲᓐ ᒐᒋ ᐊᑐᑕᒃᑲᓄᒃ ᐊᓐᑕ ᐊᑐᔅᒐᐅᓐ ᒐᒋ ᒋᒥᑕᒃᑲᓄᒃ ᒋᐋᑎᓄᒃ ᓴᔅ ᐊᒐᐱᔅᑕᒃ ᑭᓯᑯᓯᒃ
- ᐊᐱᑯᐱᐃᒃ ᒐᑉᑲᓐ ᐊᒋᒥᑕᑉᒃᑲᓄᒃ ᐅᓴᒻ ᑭᓯᑯ ᐊᑕᐃᑕᑉᒃᑲᒃ ᐊᔅᒋᔾ ᐊᔭᐸᑕᒃ ᑭᔭ ᐊᑕᐃᑕᑉᒃᑲᒃ ᑭᓯᑯ ᑭᔅᒋᑯᒃᓵ
- ᐊᓄᑕᐱᐃᒃ ᐊᑐᔅᒐᐅᓐ ᒐᒋ ᐊᐱᒋᑕᑉᒃᑲᓄᒃ ᐊᓐᑕ ᐊᒥᒐᑎᒃ ᐊᐋᓐᒋ ᐋᒋᒃ ᐊᓐᑕ ᐊᔅᒋᔾ ᐊᒥᔅᑯᑎᒃᓵ

ᒐᒋ ᒥᔅᑯᑎᓇᑲᓄᒃ ᐃᔪᐅᓐ ᐊᓐᑕ ᐃᔪᔅᒋᒃ ᑭᓯᑯ ᐊᓯᒥᔅᑯᒋᐱᐃᒃ



[ᐊᐋᐸᑎᐋᓄᒃ ᐸᐃᑯ ᐊᑎᔅᑕᒃ (Figure 1) ᐊᒋᑕᐸᑕᑉᒃᑲᓄᒃ ᑕᐊᓐ ᐊᓯᑐᔅᒐᒪᑉᒃᑲᒃ ᐃᔪᐅᓐ ᐃᑐᐅᓐ ᑭᔭ ᐊᔅᒐᐃᑎᒧᐅᓐ ᑭᔭ ᑲᐋᐱᓯᑦ ᐊᓯᓇᑐᔅᒐᐃᑕᑦ ᐃᒧᐅᓂᔪᐅ ᒐᒋ ᓇᓇᑭᒋᑕᑉᒃᑲᓄᒃ ᑭᔭ ᒪᒃ ᒥᔅᑯᑎᓇᑲᓄᒃ ᑭᓯᑯ ᐊᓯᒥᔅᑯᒋᐱᐃᒃ ᐊᓐᑕ ᐃᔪᔅᒋᒃ ᐱᒪᑎᓯᔪᐅᓐ ᐊᒋᑕᐸᑕᑉᒃᑲᓄᒃᓵ (Downing and Cuerrier, 2011).]

Photo credits: Benoît Tremblay (1), Sarah Desrosiers(2,3), José Gérin-Lajoie (4)

ᐊᔅᒋᔭ ᐊᓇᑲᑐᐋᐸᑕᑉᒃᑲᓄᒋ : ᐊᐅᑯᓐ ᐸᐃᑯ ᒐᒋ ᐃᓯᐱᒧᑕᓄᒃ ᒐᒋ ᓇᑲᑐᐋᐃᑕᑉᒃᑲᓄᒃ ᑭᓯᑯ ᒐᒋ ᒥᔅᑯᒋᐱᐃᒃ ᒐᒋ ᒪᑕᐃᑕᑉᒃᑲᒃᓵ

ᑯᐸᒃ ᐊᔅᒋᔭ ᐊᓇᑲᑐᐋᐃᑕᑉᒃᑲᓄᒋ ᓴᓯᑲᓐ ᐊᔅᐱᓴᔅ ᐊᔅᒋᔾ ᐊᒋᑕᐸᑕᑉᒃᑲᓄᒃ 8.14% ᑭᔭ ᒐᐃᑕᐱᒋᑕᑉᒃᑲᓄᒃ ᒐᒋ ᐊᑐᔅᑲᐋᒐᓄᒃ ᐊᓐᑕ ᑭᓯᑯ ᐊᓯᒥᔅᑯᒋᐱᐃᒃ ᒐᒋ ᓇᓇᑭᒋᑕᑉᒃᑲᓄᒃᓵ ᒐᒋ ᐃᔅᐱᐱᐃᒃ ᐊᔅᒋᔾ ᐋᓇᑲᑐᐋᐃᑕᑉᒃᑲᓄᒃ ᒐᒋ ᑐᐃᔅ ᐊᑐᔅᑲᔅᑕᑉᒃᑲᓄᒃ ᑭᔭ ᒥᔅᑯᑎᓇᑲᓄᒃᓵ ᐅᔭ ᐊᔅᒋᔭ ᒐᐋᐃᒋᐋᑦ ᐊᓐᑕ ᒐᐃᔅ ᓇᑲᑐᐋᐃᑕᑉᒃᑲᓄᒃ ᐱᔅᒐ ᒐᑉᑲᓐ ᒐᒋ ᓂᑲᐃᑕᑉᒃᑲᓄᒃ ᑭᓯᑯ ᒐᒋ ᒥᔅᑯᒋᐱᐃᒃ ᒐᒋ ᓇᓇᑭᒐᑉᒃᑲᓄᒃᓵ ᒐᒋ ᐊᐋᓯᓯᒃ ᑭᔭ ᓂᐱᔅᒐ ᑭᔭ ᓴᑲᐃᑭᓇ ᑭᔭ ᐱᑎᓱ ᐊᔅᒋᔾ ᐊᑎᑕᑉᒃᑲᒃ ᒐᑉᑲᓐᓵ ᓴᑲᐃᔅ ᐊᐋᐋᒋᑦ ᐊᑲ ᓱᒃ ᐊᓐᑕ ᐊᑕᒻ ᐊᐋᓐᒋ ᑭᔭ ᐊᓂᑲᐱᐃᒃ ᒐᒋ ᒥᔅᑯᒋᐱᐃᒃ ᑭᓯᑯᓯᒃᓵ