

Drought Research Initiative (DRI) – Workshop #2
Agenda and Proceedings
Inn at the Forks, Winnipeg, MB
January 11th-13th, 2007

THURSDAY, JANUARY 11

08:00 – 08:30 *Registration*

08:30 – 10:00 *Session #1: (Chair: Ron Stewart)*

- 08:30 – 08:40 Welcome and Introductions
- 08:40 – 08:50 Welcome to Manitoba and an Overview about what drought means to Manitoba (Dwight Williamson, Manitoba Water Stewardship)
- 08:50 – 09:00 Welcoming Remarks (Board of Directors: Jim Bruce)
- 09:00 – 09:10 Welcoming Remarks (CFCAS: Erica Wilson)
- 09:10 – 09:30 DRI Objectives, Strategy, Progress and an Overview of the 1999-2005 Drought (Ron Stewart)
- 09:30 – 09:45 Programmatic structure of DRI and workshop objectives (Rick Lawford)
- 09:45 – 10:00 Introductions to the DRI Website and Data Archives (Patrice Constanza)

10:00 – 10:30 *BREAK*

10:30 – 11:00 *Session #2: Drought Characterization and Impacts (Chair: Harvey Hill)*

- 10:30 – 10:40 John Hanesiak
- 10:40 – 10:50 Ted Hogg
- 10:50 – 11:00 Discussion

11:00 – 11:40 *Session #3: Subsurface to Surface Drought Linkages (Chair: John Pomeroy)*

- 11:00 – 11:10 Ken Snelgrove
- 11:10 – 11:20 Al Woodbury
- 11:20 – 11:30 Masaki Hayashi
- 11:30 – 11:40 Discussion

11:40 – 12:10 *Session #4: Regional Water and Energy Cycling (Chair: Geoff Strong)*

- 11:40 – 11:50 Kit Szeto
- 11:50 – 12:00 Ron Stewart
- 12:00 – 12:05 Henry Leighton (Ron Stewart)
- 12:05 – 12:10 Discussion

12:10 – 13:30 *LUNCH (on your own)*

13:30 – 14:30 *Session #5: Surface – Water – Atmosphere Exchanges (Chair: Ken Snelgrove)*

- 13:30 – 13:40 Paul Bullock
- 13:40 – 13:50 Chris Derksen
- 13:50 – 14:00 Rick Raddatz
- 14:00 – 14:10 Dave Sauchyn
- 14:10 – 14:20 Aston Chipanshi
- 14:20 – 14:30 Discussion

14:30 – 15:00 *Session #6A: Partner Presentations (Chair: Jim Bruce)*

- 14:30 – 14:40 Efreem Teklemariam (Manitoba Hydro)
- 14:40 – 14:50 Mike McDonald (Prairie and Arctic Storm Prediction Centre)
- 14:50 – 15:00 Harvey Hill (Prairie Farm Rehabilitation Administration)

15:00 – 15:30 BREAK

15:30 – 17:30 Session #6B: Partner Presentations

15:30 – 15:40 Irene Hanuta (Prairie Farm Rehabilitation Administration)
15:40 – 15:50 Henry Venema (International Institute for Sustainable Development)
15:50 – 16:00 Bart Oegema (Saskatchewan Watershed Authority)
16:00 – 16:10 Ray Keller (Alberta Environment)
16:10 – 16:20 Guy Ash (Canadian Wheat Board)
16:20 – 16:30 Alf Warkentin (Manitoba Water Stewardship)
16:30 – 16:40 Al Dybvig (Prairie Provinces Water Board)
16:40 – 16:50 Ken Korporal (Canadian GEO Secretariat)
16:50 – 17:00 Discussion

17:30 – 19:30 Poster Session and Reception (Poster session for investigators, grad students, collaborators, partners and observers)

17:45 Speech by Steven Fletcher, MP

FRIDAY, JANUARY 12

08:30 – 09:10 Session #7: Atmospheric Circulation and Precipitation (Chair: John Hanesiak)

08:30 – 08:40 John Gyakum
08:40 – 08:50 Geoff Strong
08:50 – 09:00 Steven Quiring
09:00 – 09:10 Discussion

09:10 – 10:00 Session #8: Drought Simulation and Prediction (Chair: Masaki Hayashi)

09:10 – 09:30 Daniel Caya
09:30 – 09:40 Charles Lin
09:40 – 10:00 Discussion

10:00 – 10:30 BREAK

10:30 – 11:20 Session #9: Field Projects, Drought Monitoring, Data Systems and Satellite Data Applications (Chair: Gary Burke)

10:30 – 10:40 Al Howard
10:40 – 10:50 Susan Skone
10:50 – 11:00 Alexander Trishchenko
11:00 – 11:10 Neil Taylor (UNSTABLE)
11:10 – 11:20 Discussion

11:20 – 12:30 Session #10: The Saskatoon Makeup Session (Chair: Harvey Hill)

11:20 – 11:30 Elaine Wheaton
11:30 – 11:40 John Pomeroy
11:40 – 11:50 Barrie Bonsal
11:50 – 12:00 Al Pietroniro
12:00 – 12:10 Al Pietroniro for Jessica Toyra/ Bruce Davison
12:10 – 12:20 Matt Regier
12:20 – 12:30 Discussion

12:30 – 12:45 PHOTO SESSION

12:45 – 13:50 LUNCH (catered)

13:50 – 15:00 Session #11: Introduction to the Themes and Working Groups

- 14:00 – 14:10 Overview of DRI Objectives (Ron Stewart)
14:10 – 14:20 Theme #1 and Cross-cutting Efforts (John Hanesiak)
14:20 – 14:30 Theme #2 and Cross-cutting Efforts (Masaki Hayashi / Barrie Bonsal)
14:30 – 14:40 Theme #3 and Cross-cutting Efforts (Charles Lin)
14:40 – 14:45 Theme #4 (Barrie Bonsal)
14:45 – 14:50 Theme #5 Update on issues raised last year (Elaine Wheaton)
14:50 – 15:00 Charge to the Working Groups and Discussion

15:00 – 16:15 Session #12: Working Group Discussions (Participants can take coffee/beverages from the central break area at 15:00 to their breakout rooms)

- Working Group Theme #1 (Chair: John Hanesiak; Rapporteur: TBC)
Working Group Theme #2 (Chair: Masaki Hayashi; Rapporteur: TBC)
Working Group Theme #3 (Chair: Charles Lin; Rapporteur: TBC)
Working Group Themes #4/5 and the Partner Working Group (Chair: Elaine Wheaton; Rapporteur: Barrie Bonsal)

16:15 – 17:45 Session #13: Summary from the Working Groups and Discussion

- 16:15 – 17:15 Reports from the Working Groups
17:15 – 17:45 Discussion on Data Integration and Data Management

18:00 – 20:00: BoD Meeting

SATURDAY, JANUARY 13

09:00 – 10:00 Session #14:

Panel (Panel members – to be confirmed: Ron Stewart, Jim Bruce, John Pomeroy, one Partner, and one Collaborator)

Discussion topics:

- What are the strengths and weaknesses of the current DRI approach?
- Where should DRI focus its efforts in the next year? In the next four years?

10:00 – 10:30 BREAK

10:30 – 11:45 Session #15: Discussion Topics (to be updated based on January 11th and 12th discussions)

Gaps in Programs Support

Gaps in scientific activities:

- Interactions between DRI and other initiatives
- Progress on issues raised at the last workshop:
 - How can we best move ahead with Themes 1-3, and what issues must be addressed?
 - Quantifying physical features of the recent Canadian Prairie drought
 - Understanding processes and feedbacks of the recent drought
 - Assessing and reducing uncertainties in prediction of drought
 - Addressing the question, “How can we move ahead with (unfunded) Themes 4/5?”

11:45 – 12:00 Session #16: Conclusion

Summary of Decisions/Actions

Adjournment

12:00 – 14:00 DRI Scientific Committee meeting

POSTERS

C.C. Agboma and K. R. Snelgrove: “Non-parameteric approach for trend delineation in the Canadian prairie”

Robert Armstrong and John Pomeroy: 'Evaluation of evaporation calculation methods during a summer drying period'

Julian Brimelow, John Hanesiak and Richard Raddatz: “Mapping the Spatio-temporal evolution of the 1999-2005 drought.”

Aston Chipanshi: The national drought model for Canada

Erin Evans: “Characterizing precipitation during the recent drought at Calgary, Alberta”

LATE: Xing Fang and John Pomeroy: Prairie Snowmelt Runoff Sensitivity Analysis to Drought

E. R. Garnett: Causes of droughts on the Canadian prairies

Heather Greene: “A preliminary analysis of cloud cover during drought and non-drought periods.”

John Jackson and Masaki Hayashi: “Testing the Versatile Soil Moisture Budget model for groundwater recharge estimation”

Suzan Lapp and Dave Sauchyn: Drought signals in GCM-based scenarios versus dendroclimatic records

Charles.A. Lin, Patrice Constanza, P. Poudret, P. Gachon, K.H. Lam and C. Saad: A Data Access Interface (DAI) and Data Integration Facility using Google Earth

Charles.A. Lin, H. Lin, L. Wen, and J. Derome: Analysis of seasonal forecast of summer precipitation from the Canadian Historical Forecast Project

Youssel Loukili: SABAE-HW – An enhancement of the Canadian Land Surface Scheme for climate assessment over the Prairies

Bano Mehdi: C-CAIRN Water Resources

Andrew Nadler: 1) Provincial fall soil moisture survey and results, 2) Manitoba Agriculture Weather Program

An Tat, John Hanesiak and Richard Raddatz: Initial Soil Moisture as a Predictor of Subsequent Summer Severe Weather in the Cropped Grassland of the Canadian Prairie Provinces

Alexander Trishchenko: Satellite Imagery for the Prairie Region: 1) July 2001, 2) July 2006

S.Z. Yirdaw and K.R. Snelgrove: “Validation of regional precipitation minus evaporation using a coupled GRACE driven moisture storage and measured basin runoff.”