





# Map/Compass/GPS for the Lightweight Backpacker

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## Principles of Lightweight Backpacking

- 1. Take enough gear to be safe, comfortable and confident.
- 2. Know the actual weight of each item.
- 3. Whenever possible, use multipurpose items.
- Look at the heaviest items first.
- 5. When selecting items, use the smallest items that will suit your needs.
- Choose lightweight gear that is useful, sturdy and dependable.
- 7. Know how to use your gear!

# **Packing Categories**

	No.	Description	Notes
•	1	Risk Management	Know before you go: weather forecast, terrain, route and water sources.
	2	Pack Weight	My objective is 10-12 lbs
	3	Footwear	Trail shoes or low cut hiking boots
	4	Backpacks	Gossamer Gear Mariposa
	5	Navigation	Map, compass, GPS
	7	Clothing System	Weather protection, thermoregulation and layers
	8	Sleep System	Sleeping bag or quilt, pad, sleep wear
	9	Shelter	Tarp tent
	10	Hydration	Platypus , purification tablets
	11	Food & Cooking Equipment	Plan for about 2 lbs of food per day, stove, fuel, pot/bowl/cup, spoon
	12	Hygiene	Toothbrush, toothpaste (mini size)
	13	First Aid	Advil, bandaids, moleskin, tweezer

## Do I know where we are going?

- Solo Hikers and Lightweight Backpackers routinely get separated because:
  - Different paces
  - Stop to take pictures
  - Stop for rest
  - Stop for a snack
  - Emergencies occur! This is a good reason to stay close together!
- Decide on a meeting place at various points during the hike.
- Everyone needs to know how to independently get there as the group spreads out.
- Techology is not a panacea if you don't know how to properly use and take the time to plan & download.

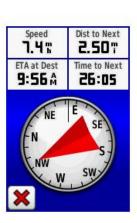
## Orienteering Gear For The Woods

- Compass and Map are de rigor.
- Fancy compasses are not necessary if you always note your direction and landmarks.
- Smartphones make poor GPS units due to power consumption
- Recharging batteries in the woods is not a practical, lightweight option fi you are thinking of recharging in the field
- Rechargeable batteries aren't a practical option unless you have disposable backups
- Disposable Li-Ion batteries (AA or AAA) provide best weight, life, power density and wide temperature performance. About \$8-10 per 4 pack. Most GPS only need 2 batteries.
- Bring only as much GPS as you really need!
- SPOT Message or similar Personal Beacons are useful but don't misuse SAR if not life threatening emergency.

## My Favorite GARMIN Models







#### **Garmin Foretrex 301/401**

- 3.1 oz
- Wear like a wristwatch
- Average 17 hours on 2 AAA batteries
- MSRP \$150/\$200 (with Electronic Compass + Barometric Altimeter + Wireless Transfer)

#### Garmin Dakota 10/20

- 5.25 oz
- Smallest touch screen color GPS
- Average 20 hours on 2 AA batteries
- Internal 850 MB Flash Memory
- Dakota 10, MSRP \$200
- Dakota 20, MSRP \$280, Electronic
   Compass + Barometric Altimeter +
   MicroSD Card + Wireless Transfer

Extra \$50 for Electronic Compass is well worth the extra investment

## Garmin Subscription Options

 Map Updates (if you purchased a map product –DVD or MicroSD)



- Birdseye Satellite Imagery Downloads, \$30 per year
- Birdseye Topo Downloads, \$30 per year



- Download subscriptions are registered to your GPS device
- GPS device must be connected to PC running Basecamp to authorize and download images or topo maps.
   Download imagerry/maps to Basecamp, then transfer to your Garmin GPS.
- Export/email GPX file to your friends so they can download and then upload to their GPS.

## SPOT Satellite Messenger





• Check-In/OK



 Non-life threatening alert to friends and family



Life Threatening message, alerts SAR



Tracks



- Spot Assist for Automobile Assistance
- Good thing to have if you hike alone
- MSRP \$120, 5.2 oz

### **GPS Basics**

- Waypoint = a point on the map
- Route = collection of waypoints arranged from Start to Finish
- Track = bread crumb trail of your actual hike
- Trip Computer
- Compass
- Customize fields shown on Trip Computer and Compass if possible
- Reset Trip Computer and Tracks before you start
- Always carry a map with labeled Waypoints and Route

## LWBP Resources

